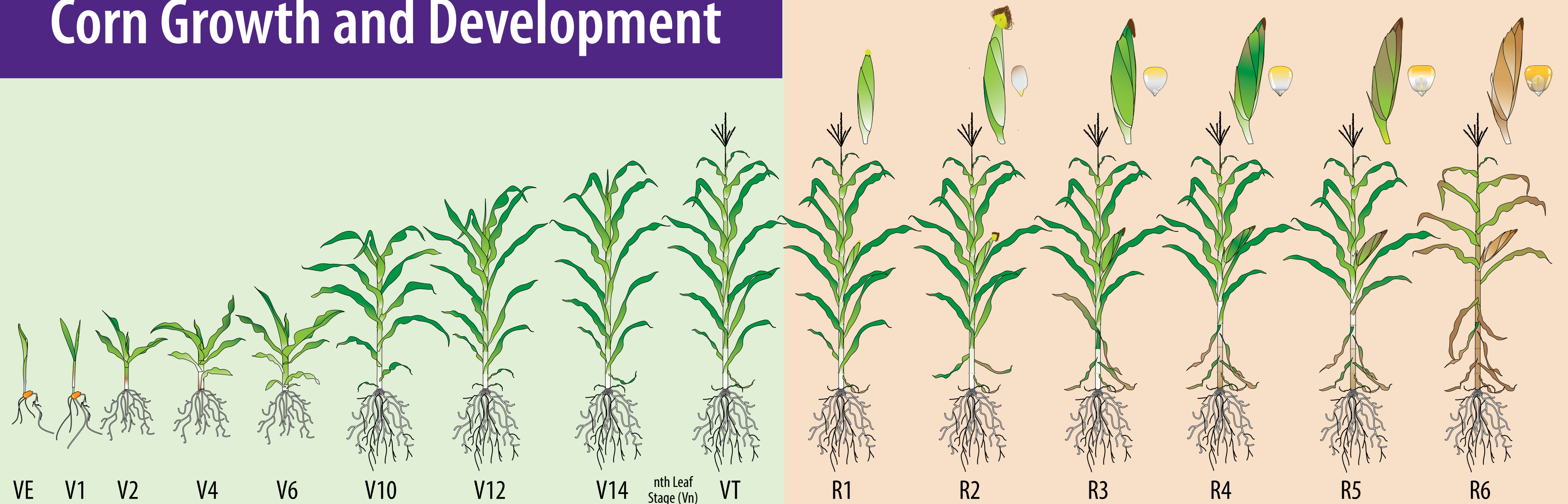


# Corn Growth and Development



## Vegetative

## Reproductive

### Corn Development Stages

#### VE – Emergence

Emergence occurs when the first leaves, called the spike or the coleoptile, appear above the soil surface. The seed absorbs water (about 30% of its weight) and oxygen for germination. The radicle root quickly emerges near the tip of the kernel, depending on soil moisture and temperature conditions. The coleoptile emerges from the embryo side of the kernel and is pushed to the soil surface by mesocotyl elongation. The mesocotyl encloses the plumule leaves that open as the structure approaches the soil surface.

##### Management

Ideal soil temperatures (50 to 55 degrees Fahrenheit) and moisture conditions promote rapid emergence (5 to 7 days). Optimum seed placement varies from 1 to 2 inches deep. Appropriate planting depth is critical for optimal emergence. Cold, dry, and deep planting can delay emergence for several days.

#### V1 – First-Leaf

One leaf with collar visible (structure found at the base of the leaf). The first leaf in corn has a rounded tip. From this point until flowering (R1 stage), leaf stages are defined by the uppermost leaf with visible collars. The growing point is located below the surface until the late V5 stage.

##### Management

Scout for proper emergence (e.g., 30 plants in 17½ feet for 30-inch row spacing = 30,000 plants per acre), early-season weeds, insects, diseases, and other production issues.

#### V2 – Second-Leaf

Nodal roots begin to emerge below ground. Seminal roots begin to senesce. Frost is unlikely to damage corn seedling, unless it is extremely cold or the corn was shallowly planted.

#### V4 – Fourth-Leaf

Nodal roots are dominant, occupying more soil volume than seminal roots. Leaves still developing on apical meristem (primary growth of the plant).

#### V6 – Sixth-Leaf

Six leaves with collar visible. The first leaf with the rounded tip is senescent; consider this point when counting leaves. The growing point emerges above the soil surface. All plant parts are initiated. Sometime between V6 and V10, the potential number of rows (ear girth) is determined. Potential row number is affected by genetics and environment and is reduced by stress conditions. The plant increases in height due to stalk elongation; nodal roots are established in the lowest, below-ground nodes of the plant.

##### Management

Scout for weeds, insects, and diseases. Rapid nutrient uptake begins at this stage. Timing nutrient applications to match this uptake enhances the potential for greater nutrient use efficiency, particularly for mobile nutrients such as nitrogen.

#### V10 – Tenth-Leaf

Brace roots begin to develop in the lower above-ground nodes of the plants. Until this stage, rate of leaf development is approximately 2 to 3 days per leaf.

##### Management

Nutrient (potassium = K > nitrogen = N > phosphorous = P) and water (0.25 inch per day) demands for the crop are high. Heat, drought, and nutrient deficiencies will affect potential number of kernels and ear size. Scout for root lodging issues and diseases (e.g., common rust, brown spot). Weed control is critical since corn does not tolerate early-season competition for water, nutrients, and radiation well.

#### V14 – Fourteen-Leaf

Rapid growth. This stage occurs approximately two weeks before flowering. Highly sensitive to heat and drought stress. Four to six extra leaves will expand from this stage until VT.

##### Management

Scout for root lodging issues, greensnap (likely to occur from V10 to VT) and diseases (e.g., common rust, brown spot). Abnormal corn ears can occur and be obvious from this time until flowering.

#### VT – Tassel

Potential kernels per row is set, final potential grain number (number of ovules), and potential ear size are being determined. Last branch of the tassel is visible at the top of the plant. Silks may or may not have emerged. The plant is almost at its maximum height.

##### Management

Nutrient (K > N > P) and water (0.30 inch per day) demands for the crop are close to maximum. Heat and drought will affect potential number of kernels. Scout for insects (e.g., corn leaf aphid, western bean cutworm, corn earworm, fall armyworm) and diseases (e.g., gray leaf spot, southern rust, northern leaf blight). Total leaf defoliation severely affects final yields.

#### R1 – Silking

Flowering begins when a silk is visible outside the husks. The first silks to emerge from the husk leaves are those attached to potential kernels near the base of the ear. Silks remain active until pollinated. Pollen falls from the tassel to the silks, fertilizing the ovule to produce an embryo. Potential kernel number is determined. Maximum plant height is achieved. Following fertilization, cell division is occurring within the embryo.

##### Management

Nutrient (N and P accumulation is still progressing, K is almost complete) and water (0.33 inch per day) demands are at the peak. Heat and drought will affect pollination and final grain number. Defoliation by hail or other factors such as insects will produce a large yield loss.

#### R2 – Blister

Silks darken and begin to dry out (approximately 12 days after R1). Kernels are white and blister-like in shape and contain a clear fluid. Kernels are approximately 85% moisture; embryos develop in each kernel. Cell division is complete. Grain filling commences.

##### Management

Stress can reduce yield potential by reducing final grain number (abortion).

#### R3 – Milk

Silks dry out (approximately 20 days after R1). Kernels are yellow, and a milk-like fluid can be squeezed out of the kernels when crushed between fingers. This fluid is the result of the starch accumulation process.

##### Management

Stress will still cause kernel abortion, initially from the ear tip.

#### R4 – Dough

Starchy material within the kernels has dough-like consistency (approximately 26 to 30 days after R1). Rapid accumulation of starch and nutrients occurs; kernels have 70% moisture and begin to dent on the top. Material squeezed out of the kernel has dough-like consistency.

##### Management

Stress can produce unfilled or shallow kernels and “chaffy” ears. Impact of frost on grain quality can be severe when it occurs at this stage (25 to 40% yield loss from light to killing frost, respectively).

#### R5 – Dent

Most of the kernels are dented. Kernel moisture declines to approximately 55% (38 to 42 days after R1) as the starch content increases.

##### Management

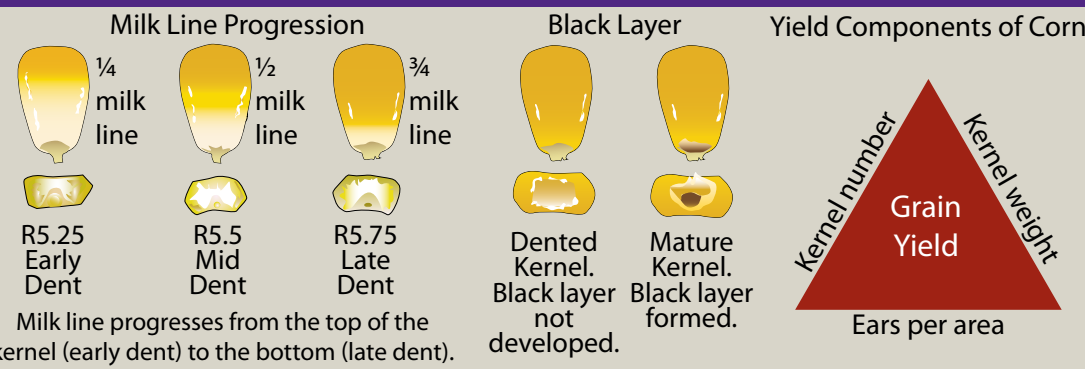
Stress can reduce kernel weight. Silage harvest is approaching (at around 50% kernel milk).

#### R6 – Maturity

A black layer forms at the base of the kernel, blocking movement of dry matter and nutrients from the plant to the kernel (50 to 60 days after R1). Kernels achieve maximum dry weight (30 to 35% moisture) and are physiologically mature.

##### Management

Grain is not ready for safe storage. Frost or any biotic or abiotic stress does not impact yields after this development stage. Lodging from disease, insect damage, or hail can result in physical loss of yield. Harvest can proceed, but recommended moisture for long-term storage is 14.5%. Scout fields for ear drop due to things such as European corn borer damage.



Yield components and critical growth stages for their definition in corn production.

Yield Components		
Stage	Potential	Actual
VE	Ears/area	—
V6	Kernel rows/ear	“Factory” <sup>23</sup>
V12	—	Kernel rows/ear
V18	Kernels/row	—
R1 <sup>1,2</sup>	Kernel weight	Kernel number
R1 to R5	Ears/area	R1 to R5
R6	—	Kernel weight

<sup>1</sup>Potential Kernel Weight = set when cell division takes place in the endosperm, 7 to 10 days after pollination (R1-R2 or the “lag” phase of the sigmoidal kernel growth curve).

<sup>2</sup>R1 = potential kernel ovules and kernel number, if no stress is affecting pollination and final kernel development.

<sup>3</sup>Factory = After tassel initiation at V5, all corn plant parts are already developed to support ear and grain development.

Growth stages, moisture content, and total dry matter progression for corn during the reproductive period.<sup>1</sup>

R Stage	Moisture %	Dry Matter (% of Total Dry Weight)	Average per Substage	
			Growing Degree Days, °F	Days
5.0	60	45	75	3
5.25 (¼ milk line)	52	65	120	6
5.5 (½ milk line)	40	90	175	10
5.75 (¾ milk line)	37	97	205	14
6.0 (Physiological maturity)	35	100		

<sup>1</sup>Abendroth, L.J., R.W. Elmore, M.J. Boyer, and S. K. Marlay. 2011. *Corn Growth and Development*. PMR 1009. Iowa State Univ. Extension. Ames Iowa.

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Based on information from *How a Corn Plant Develops*, Special Report No. 48, 1986 and *Corn Growth and Development*, PMR 1009, 2011. Iowa State University Extension.

Reviewers: J. Coulter, University of Minnesota and D. Fjell, Kansas State University.

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Sorghum Growth Stages and Identifying Characteristics	
Growth stage	Identifying characteristic
0	<b>Emergence.</b> Coleoptile visible at soil surface.
1	<b>Three-leaf stage.</b> Collar of third leaf visible.
2	<b>Five-leaf stage.</b> Collar of fifth leaf visible.
3	<b>Growing point differentiation.</b> About eight-leaf stage with a visible collar.
4	<b>Flag leaf visible.</b> Final leaf visible in whorl.
5	<b>Boot stage.</b> Head extended into flag leaf sheath.
6	<b>Half-bloom.</b> Half of the plants at some stage of bloom.
7	<b>Soft-dough.</b> Grains are soft with little or no liquid present when squeezed.
8	<b>Hard-dough.</b> Grains are hard when squeezed.
9	<b>Physiological maturity.</b> Black layer on the bottom of kernel.

### Stage 0

**Emergence:** The plant breaks through the soil surface; early growth usually is slow. The time between planting and emergence depends on soil temperature, residue cover and distribution, soil moisture, planting depth, and seed vigor. Adjust planting time so emergence occurs in favorable conditions.

### Stage 1

**Three-leaf stage:** Three leaves are fully expanded with a visible collar (leaf tissue at the junction of the leaf blade and sheath). The growing point is under the soil surface. This stage occurs 10 to 20 days after emergence, depending on soil temperature and moisture.

### Stage 2

**Five-leaf stage:** Five leaves are fully expanded with a visible collar. The growing point is below the soil surface. The plant begins a rapid growth and nutrient accumulation phase. The root system is expanding rapidly. Minimize weed competition from planting through this growth stage. This stage occurs 20 to 25 days after emergence.

### Stage 3

**Growing point differentiation:** Potential leaf number is defined 30 to 40 days after emergence. Maximum plant growth and nutrient uptake rates are achieved. The growing point is above the surface and changes from producing leaves to forming heads.

### Stage 4

**Flag leaf visible:** Rapid stem elongation and increases in leaf area occur at this stage. The final leaf, the "flag leaf," is visible in the whorl. Potassium uptake is >40%, nitrogen >30%, phosphorus >20%, and total growth is about 20% complete relative to final nutrient content.

### Stage 5

**Boot stage:** Maximum leaf area has been achieved. Maximum potential head size and seed number has been set. The upper stalk, known as the "peduncle," begins to elongate. Final size of the peduncle varies with the genotype. This stage occurs 50 to 60 days after emergence.

### Stage 6

**Half-bloom:** Full exsertion of the head occurs at this stage and 50% of the plants in the field are in some stage of bloom. For an individual plant, this stage is when the flowering reaches 50% of the head. Total growth is 50% complete. Compared to final nutrient content, nutrient accumulation is 60% for phosphorus, 70% for nitrogen, and >80% for potassium.

### Stage 7

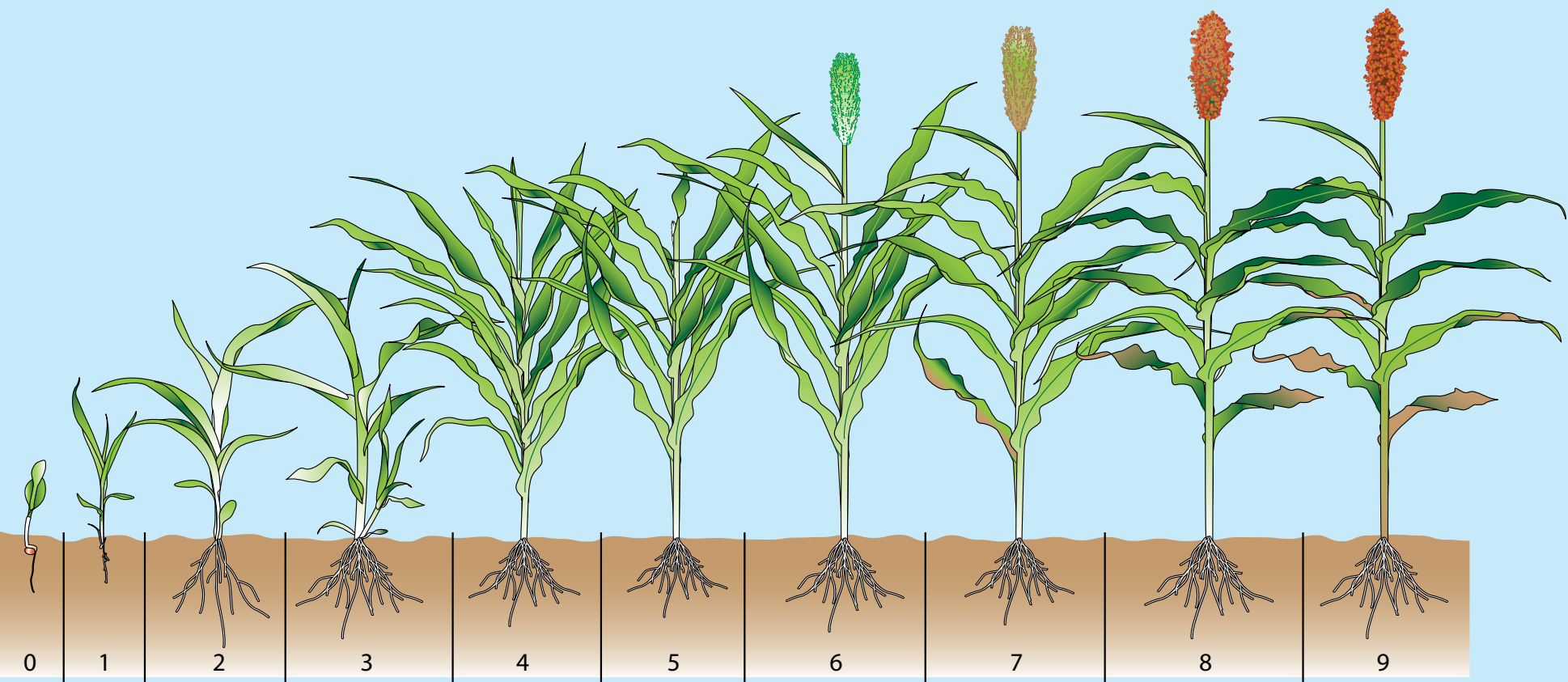
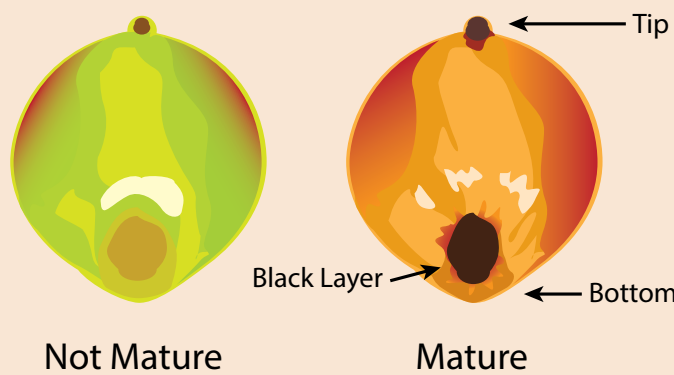
**Soft-dough:** Grain formation begins immediately after flowering and the grain fills rapidly (50% of dry weight). The stem loses weight due to a remobilization process (from stem to grain). Grains are the main priority for the plant; thus, without a good balance between leaves (source) and grain (sink), the duration of grain filling can be shortened. A severe stress at this growth stage can produce lighter and chaffy grains.

### Stage 8

**Hard-dough:** Grain reaches 75% of its final dry weight and nutrient uptake is almost complete. Lower leaves lose functionality due to remobilization of nutrients to grains or senescence. A severe stress at this growth stage can still reduce grain weight, but not at the extent possible in the soft-dough stage.

### Stage 9

**Physiological maturity:** Grain achieves its maximum dry weight. Mature grain is identified by looking for the dark spot, the black layer, on the bottom of the kernel. Grain moisture ranges from 25 to 35%. The time to harvest depends on the environmental conditions. Artificial drying can be promoted by the use of desiccants without affecting yield when applied after maturity.



Sorghum Development Stages

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# NORTH AMERICAN EXPORT GRAIN ASSOCIATION, INC.

## FREE ON BOARD EXPORT CONTRACT U.S.A./CANADA

Use of this contract, in whole or in part, is subject to compliance with its Terms of Use, which are available upon request

Revised as of March 30, 2018

# NO.2

Contract No. \_\_\_\_\_

New York, N.Y. \_\_\_\_\_ 20 \_\_\_\_\_

1. **Seller** \_\_\_\_\_
2. **Buyer** \_\_\_\_\_
3. **Broker/Agent** \_\_\_\_\_
4. **Quantity** \_\_\_\_\_  
in bulk, including dockage, 5% more or less at buyer's option, and at market price (per Clause 10) as follows: If the first delivery under this contract is for a quantity between contract minimum and contract maximum (both inclusive), no further deliveries shall be made. If this contract is to be executed by more than one vessel, the loading tolerance of 5% more or less shall apply on the difference between the mean contract quantity and the quantity that has been delivered on all prior vessels. Any delivery which falls within this difference, plus or minus 5%, shall complete the contract.
5. **Weight** Quantity to be final at port of loading in accordance with customary weight certificates. 1,016 kilograms shall be equal to 2,240 pounds.
6. **Commodity** \_\_\_\_\_  
in accordance with the official grain standards of the United States or Canada, whichever applicable, in effect on the date of this contract. Delivery of higher (better) grades of grain of the same type and description is permissible.
7. **Quality** Quality and condition to be final at port of loading in accordance with official inspection certificates and/or other certificates as may be required in this contract.  
  
In case of delivery at St. Lawrence ports, quality and condition to be final in accordance with Lake and/or loading ports official inspection certificates; Lake inspection certificates to be properly identified at ports of loading.  
  
Each party hereby authorizes the other party to request in both parties' names an appeal inspection under the U.S. Grain Standards Act, if applicable, or as may be required in this contract at any time prior to or during the loading of the vessel, and whether or not such request was filed before commencement of loading. The cost of such appeal inspection, unless otherwise stipulated in this contract, shall be borne by the party requesting it.  
  
The commodity is not warranted free from defect, rendering same unmerchantable, which would not be apparent on reasonable examination, any statute or rule of law to the contrary notwithstanding.
8. **Delivery** Delivery shall be made between \_\_\_\_\_ and \_\_\_\_\_, both inclusive (the "delivery period"), at discharge end of loading spout, to buyer's tonnage in readiness to load, in accordance with custom of the port and subject to the elevator tariff to the extent that it does not conflict with the terms of this contract. Incorporation of a loading rate guaranty in this contract shall not entitle seller to delay delivery.  
  
Buyer shall give vessel nominations ("preadvice") in accordance with Clause 15, in time for seller to receive minimum \_\_\_\_\_ days notice of probable readiness of tonnage and quantities required (the "preadvice period"). Buyer to keep seller informed of changes in expected date of vessel readiness.  
  
Time for the preadvice shall be deemed to commence to count at 1200 noon, local time at place of receipt, on the business day of receipt by seller and shall be counted in consecutive periods of 24 hours.  
  
Seller shall, if applicable, declare port and berth of loading within a reasonable time (but not later than \_\_\_\_\_ days) after receipt by seller of the preadvice, except that seller shall not be obligated to make such declaration earlier than (a) the 8th day prior to commencement of the delivery period for port declaration and (b) the 5th day prior to commencement of the delivery period for berth declaration.  
  
The vessel shall not be prevented from filing and from taking its place in the vessel line-up at the designated port/berth during the preadvice period or before commencement of the delivery period, notwithstanding which, seller shall not be obliged to effect delivery to the vessel before the expiration of the preadvice period or before commencement of the delivery period. For the purposes of this contract a vessel shall be considered filed when it (a) has tendered valid notice of readiness to load to the charterer or its agent, at the port of loading, (b) has given written advice of such tender to the loading elevator, complete with all customarily required documents, such advice having been presented between the hours of 0900 and 1600 local time on a business day or between the hours of 0900 and 1200 noon on Saturday (provided not a holiday) and (c) is ready to receive grain in the compartments required for loading under this contract.  
  
Buyer shall be allowed to make one substitution of a vessel, provided the substituting vessel is of the same type and approximately the same size and position. If the original or the substituting vessel is unable to lift the commodity by reason of the vessel having sunk or having suffered incapacitating physical damage, an additional substitution shall be made of a vessel of the same type and approximately the same size, and with a position agreeable to buyer and seller. Such agreement shall not be unreasonably withheld. The nomination of the substituting vessel shall be subject to the preadvice requirements of this clause, regardless of any preadvice previously given, unless the estimated time of arrival of the substituting vessel is the same as the estimated time of arrival of the original vessel when nominated. No substitution of vessels other than as provided in this clause shall be made. If this is a "named vessel" contract, no substitution other than after a casualty as described above shall be permitted.  
  
Bills of lading and/or mate's receipts to be considered proof of date of delivery in the absence of evidence to the contrary. Any delivery in part fulfillment of this contract shall be considered as if made under a separate contract.
9. **Days** In any month containing an odd number of days, the middle day shall be reckoned as belonging to both halves of the month.

**10. Price**

\_\_\_\_\_ per \_\_\_\_\_ free on board buyer's tonnage at \_\_\_\_\_  
If this contract is for a flat price, any variance in quantity from the mean contract quantity shall be settled basis the FOB market value (as defined in paragraph (a) and (b) below).

If the contract price is to be established on an exchange of futures, futures shall be exchanged prior to delivery of the commodity or at least 5 calendar days prior to the last trading day of the applicable futures month, whichever is earlier, to the nearest 5,000 bushels of the mean contract quantity. If deliveries under this contract result in a variance from the mean contract quantity, there shall be another exchange of futures as soon as possible after the last date of loading to bring the resulting amount of futures exchanged to the nearest 5,000 bushels of the quantity delivered. All exchanges of futures shall be made within the range of prices prevailing on the futures market on the date of the exchange. The variance from the mean contract quantity shall be settled basis the market value of the premium (as defined in paragraph (a) and (b) below).

- (a) The FOB (flat price) market value, or the market value of the premium, as the case may be, shall be that prevailing on the close of the appropriate market in the country of origin of the commodity on the last date of loading, if such be a business day, otherwise on the close of such market on the previous business day.
- (b) In the event the parties do not agree on the market value by the time the shipping documents are ready to be transmitted to buyer, seller shall invoice the entire shipment provisionally at contract price. Thereafter, final invoice for the difference between contract price and market value shall be presented as soon as possible and payment shall be made immediately.

**11. Payment**

- \*(a) Net cash by irrevocable divisible letters of credit issued or confirmed by a prime U.S. bank in New York (or \_\_\_\_\_ by mutual agreement), available by sight drafts accompanied by shipping documents per Clause 12 (or warehouse receipts if option (c) of Clause 18 is exercised). Such letters of credit, in a form acceptable to seller, shall be established not later than 5 days prior to the beginning of the delivery period, and shall be valid at least until the 30th day after expiration of the delivery period. Should delivery be delayed beyond the delivery period, buyer, if requested by seller, shall amend letters of credit accordingly and buyer shall increase the amount of the letter of credit to provide for carrying charges, if applicable. All bank charges shall be for buyer's account.

--or--

- \*(b) Net cash in U.S. Dollars, by telegraphic transfer to the bank designated by seller, against presentation of and in exchange for shipping documents per Clause 12 (or warehouse receipts if option (c) of Clause 18 is exercised). Such presentation shall be made in the city of \_\_\_\_\_  
All bank charges in connection with payment shall be for buyer's account.

--or--

- \*(c) \_\_\_\_\_

\*Delete paragraphs which are not applicable.

**12. Shipping Documents**

Payment to be made against bills of lading or mate's receipts (at seller's option), and weight and inspection certificates. However, if practicable, seller shall follow instructions of buyer in establishing bills of lading containing such clauses as buyer's/vessel's agents or owners usually endorse or attach. Buyer shall accept such bills of lading but seller assumes no responsibility for their correctness.

**13. Notice of Delivery**

Notice of delivery stating vessel's name, dates of bills of lading (or mate's receipts), quantities and qualities loaded (including percentage of dockage if applicable) shall be given or passed on by seller to buyer without undue delay. Notices of delivery shall be subject to correction of any errors.

**14. Insurance**

Marine and war risk (plus strikes, riots, civil commotions and mine risk) insurance, covering seller's/buyer's interests as they may appear, is to be covered by buyer with first-class approved companies and/or underwriters and to be confirmed by such companies and/or underwriters to seller at least 5 days prior to the expected readiness of the vessel. If this confirmation is not received by seller by such time, seller may place such insurance for buyer's account and at buyer's risk and expense.

**15. Communications**

All notices under this contract shall be given by letter, if delivered by hand on the day of writing, or by any other method of rapid written communication. Any notice received after 1600 hours (local time at place of receipt) on a business day shall be deemed to have been received on the following business day, except that for notices given and received by parties which are both located in the Continental United States and/or Canada, the reference herein to 1600 hours shall signify 1600 hours New York City time (E.S.T. or E.D.T., as in effect on date of receipt of the notice).

**16. Circles**

- (a) For the purposes of this clause, a circle shall consist of a series of contracts in which each seller is also a buyer of a commodity of the same description and quality, for delivery at the same ports and with compatible delivery periods.
- (b) If this contract forms part of a circle, each party may agree with the other parties in the circle to forego actual delivery and to participate in a clearing agreement for the settlement of contract price differences. Monies due and owed to parties in the circle shall be payable on the middle day of the contract delivery period.
- (c) If a circle can be shown to exist but no clearing agreement has been reached by the 10th calendar day following the last day of the delivery period, actual delivery shall not be made and payment shall be made by each buyer to its seller of the excess of seller's invoice amount over the lowest invoice amount in the circle. Such payments shall be made promptly after the 10th calendar day following the last day of the delivery period.
- (d) Should any party in a circle fail to make payment on the due date as required under paragraph (b) or (c) above for reasons cited in Clause 23 or for any other reason, payment shall be made between each buyer and its seller of the difference between the seller's invoice amount at contract price and the market value of the commodity on date of insolvency or default, as the case may be. Such payment shall be made latest on the 2nd business day after the due date under paragraph (b) or (c) above. Payments already made under paragraph (b) or (c) above shall be refunded.
- (e) All circle settlements shall be based on the mean contract quantity.

If a circle under paragraph (b), (c) or (d) above exists, Clause 21 shall not apply and Clauses 18 and 20 shall not be invoked. Payments due on a non-business day shall be made not later than the following business day.

All payments made after the delivery period shall include carrying charges from the day following the last day of the delivery period, to the date of payment, at the rates stipulated in this contract. These carrying charges shall be settled individually between each buyer and its seller.

- (f) The parties agree that any dispute arising out of the voluntary clearing agreement entered into in accordance with paragraph (b) above shall be subject to arbitration as to any party thereto. Such arbitration shall be conducted in accordance with the provisions of Clause 30.

**17. U.S./Canadian Government Rules and Regulations**

Buyer and seller agree to comply with the U.S. and/or Canadian regulatory requirements applicable to this contract, including, but not limited to, those governing any export subsidy, destination controls, government financing of agricultural commodities and the monitoring of export purchases and sales. Any losses, fines, penalties, expenses, costs or damages incurred as a result of failure to perform in accordance with this provision shall be borne by the party responsible for such failure.

**18. Failure to  
Take Delivery**

If vessel fails to file before the end of the delivery period, buyer shall be in breach of contract and seller shall carry the grain for buyer's account and risk as provided in Clause 19. In the event that buyer has not given vessel nominations conforming to the applicable provisions of Clause 8 by the 15th calendar day following the last day of the delivery period, or if the vessels having been nominated within such time, fail to file by the 35th calendar day following the last day of the delivery period, seller may, in its discretion: (a) continue to carry the commodity for buyer's account and risk, (b) declare buyer in default, or (c) tender to buyer proper warehouse receipts in a quantity equal to the mean quantity open under this contract, in exchange for which buyer shall pay at contract price plus accrued carrying charges, but less out-elevation and outbound weighing and inspection charges. Such tender of warehouse receipts shall be deemed due performance of the contract by seller.

**SPECIAL PROVISIONS FOR CONTRACTS PROVIDING FOR DELIVERY AT ST. LAWRENCE, GREAT LAKES OR HUDSON BAY PORTS:**

- (1) Seller shall be barred from declaring option (b) above while the navigation in the designated delivery area is officially closed for the ice season, and for 20 days thereafter.
- (2) However, if options (a), (b) and (c) above become available to seller only while the navigation is officially closed, the seller may declare option (b) during the first 10 days it becomes available to him; thereafter, he shall be barred from declaring it, until the 21st day after the official opening of navigation.
- (3) If seller carries the grain into the new season for buyer's account, buyer shall have the right to nominate vessels per Clause 8, regardless of whether vessels were already nominated during the delivery period.

**19. Carrying  
Charges**

If the commodity is being carried for buyer's account and risk as provided in Clause 18, it is mutually agreed that carrying charges, consisting of storage, insurance and interest, shall accrue as follows:

- (a) Storage and insurance from the day following the last day of the delivery period up to and including the dates of delivery (or if seller exercises option (b) or (c) of Clause 18, the date applicable thereto), both dates inclusive, at the following rates:

\_\_\_\_\_ U.S. cents per bushel per day \_\_\_\_\_  
\_\_\_\_\_ U.S. cents per bushel per day \_\_\_\_\_

- (b) Interest from the day following the last day of the delivery period up to and including the last day of delivery (or if seller exercises option (b) or (c) of Clause 18, the date applicable thereto), both dates inclusive, at the following rates:

Carrying charges for the delivery completing this contract shall be computed on the mean contract quantity less the amounts previously delivered (if any), irrespective of whether or not buyer has availed himself of the loading tolerance option under Clause 4. It is further expressly agreed that carrying charges as provided herein are to be construed in the nature of liquidated damages and, as such, that no further proof of damages shall be required in substantiation thereof.

**20. Strikes or  
Other Causes  
Of Delay in  
Delivery**

- (a) This clause shall apply by reason of the causes enumerated in paragraph (b) below:
  - (1) if delivery by seller of the commodity, or any part thereof, is prevented or delayed at the port(s) of delivery and/or elevator(s) of delivery or elsewhere,  
and/or,
  - (2) if the forwarding of the commodity to such port(s) and/or elevator(s) is prevented;

PROVIDED that seller shall have sent notice to buyer not later than 2 business days after the date of commencement of the causes, or not later than 2 business days after the 1st day of the delivery period, whichever occurs later (except that subsequent sellers shall not be bound by these deadlines, provided they pass along the notice to their buyer, without delay); and PROVIDED further that seller shall, at buyer's request, furnish a certificate of the North American Export Grain Association, Inc., certifying the existence and the duration of the causes. Such certificate shall be final.

- (b) The causes of delay and/or prevention ("causes") referred to in paragraph (a) above shall be:
  - (1) Riots, strikes, lockouts, interruptions in or stoppages of the normal course of labor,
  - (2) Embargoes or exceptional impediments to transportation,
  - (3) Action by Federal, State or local government or authority.
- (c) The obligation of seller to make delivery shall be suspended while the causes are in effect, until the termination of the causes and/or the resumption of work after the termination of the causes, whichever is later. Seller shall not be responsible for further delays after resumption of work (whether such termination or resumption of work occurs prior to, during or after the delivery period) except that, if a vessel nominated under this contract is not loaded in the proper rotation but is bypassed by vessels (other than liners) which had filed after the vessel nominated under this contract, seller shall pay to buyer damages equal to the actual working time lost (weather working days, Saturdays, Sundays and holidays excluded) to buyer's vessel during the loading of the bypassing vessels, at the demurrage rate in the Charter Party for the vessel nominated under this contract.

If the Charter Party of the vessel under this contract does not indicate a demurrage rate, the damages are to be calculated at a reasonable demurrage rate predicated on the then current market, to be agreed upon amicably or to be determined by arbitration.

- (d) (1) If the causes commence before or during the delivery period and terminate during or after delivery period, then the delivery period shall be deemed to be extended by a number of days equivalent to the period starting with the commencement of the causes or the commencement of the delivery period, whichever is later, and ending with the termination of the causes, and/or the resumption of work after the termination of the causes, whichever is later.  
  
(2) If the causes commence during the additional time afforded to buyer under Clause 18 with respect to vessel nominations and filings, then the right of seller to exercise option (b) or (c) under Clause 18 shall be deemed to be delayed by a number of days equivalent to the period starting with the commencement of the causes and ending with the termination of the causes and/or the resumption of work after the termination of the causes, whichever is later.

(3) Clause 20 may apply if a vessel has filed during the delivery period and the cause commences after the end of the delivery period.

- (e) Carrying charges, if due under Clauses 18/19, shall begin to accrue on the day following the last day of the delivery period, as extended by paragraph (d)(1) above; however, if this clause becomes operative while carrying charges are already accruing, then such charges shall continue to accrue as they would in the absence of the causes.

- 21. Prohibition** In case of prohibition of export, blockade or hostilities or in case of any executive or legislative act done by or on behalf of the government of the country of origin or of the territory where the ports of loading named herein are situated, restricting export, whether partially or otherwise, any such restriction shall be deemed by both parties to apply to this contract and to the extent of such total or partial restriction to prevent fulfillment and to that extent this contract or any unfulfilled portion thereof shall be cancelled without prejudice to seller's entitlement to carrying charges. Seller shall advise buyer without delay of the reasons therefore, and if required by buyer, seller shall provide certification of the North American Export Grain Association, Inc., as sufficient evidence for cancellation under this clause.
- 22. Default** In case of default by either party, the other party shall be at liberty, after giving notice, to resell or repurchase, as the case may be, without undue delay and the defaulting party shall make good the loss, if any, to the other party but the defaulting party shall not be entitled to any profit. If the non-defaulting party has not repurchased or resold the commodity by the 10th calendar day after the giving of notice of default, the market value on the said 10th day shall be used for settlement purposes. If such 10th day falls on a non-business day, the market value on the previous business day shall govern. In the event of a default by buyer, the sale price under this contract shall automatically be increased by the value of carrying charges calculated up to the date of resale, or the 10th calendar day after the giving of notice of default, whichever is applicable.
- 23. Insolvency** Either party shall, at any time after sending notice, have the right to terminate this contract and to recover the loss (if any) in the event that:
- (a) the other party suspends payment or commits an act of bankruptcy;
- OR--
- (b) reasonable grounds for insecurity having arisen with respect to the financial capacity of the other party to perform under this contract, and a written demand for adequate assurance of due performance having been made, such assurance is not received within a period of time not exceeding 5 days.
- 24. Construction** For the purposes of this contract, except as otherwise expressly provided or unless the context otherwise requires, plural terms include the singular.
- 25. Passage of Title** Anything in this contract to the contrary notwithstanding, seller shall retain title to the commodity until seller has been paid in full (per Clause 11), it being understood that risk of loss shall pass to buyer on delivery at discharge end of loading spout (per Clause 8).
- 26. Limitation of Liability** The seller shall not be liable under this contract, except as expressly stated herein, after delivery of the commodity at the discharge end of the loading spout and presentation of the contractually required documentation. The buyer assumes all claims, losses, costs, and damages ("expenses") and risks whatsoever at the discharge end of the loading spout including, but not limited to, compliance with any requirements by customs, quarantine and other authorities except for the U.S. and/or Canadian regulatory requirements applicable to this contract. All such expenses and risks arising from events or actions after the delivery of the commodity at the discharge end of the loading spout shall be the sole responsibility of the buyer, who shall indemnify and hold the seller harmless for all such expenses and risks incurred (including attorney fees).
- 27. International Convention** The following shall not apply to this contract:
- (a) the Uniform Law on the International Sale of Goods and the Uniform Law on the Formation of Contracts for the International Sale of Goods;
- (b) the United Nations Convention on Contracts for the International Sale of Goods of 1980; and
- (c) the United Nations Convention on the Limitation Period in the International Sale of Goods, concluded at New York on 14 June 1974, and the Protocol Amending the Convention on the Limitation Period in the International Sale of Goods, concluded at Vienna on 11 April 1980.
- 28. Governing Law** The parties agree that this contract shall be governed by the laws of the State of New York, notwithstanding any choice of law provision to the contrary.
- 29. Other Conditions**
- 30. Arbitration** Buyer and seller expressly agree that any controversy or claim arising out of, in connection with or relating to this contract, or the interpretation, performance or breach thereof, shall be settled by arbitration in the City of New York before the American Arbitration Association (AAA), or its successors, in accordance with the International Arbitration Rules of the American Arbitration Association, as those Rules may be in effect at the time of such arbitration proceeding, which Rules are hereby deemed incorporated herein and made a part hereof, and under the laws of the State of New York. The number of arbitrators shall be three.

Each party shall designate one arbitrator from the list of Grain Arbitrators maintained and supplied by the North American Export Grain Association, Inc. The two party appointed arbitrators shall select a third panelist from the list of Special Grain Arbitrators or the AAA list of International Arbitrators and this person shall serve as Chairperson of the panel.

AAA shall maintain a list of Special Grain Arbitrators who are included on the North American Export Grain Association, Inc. list of Grain Arbitrators. If the tribunal is not formed by this procedure, the AAA shall appoint the panel in the same manner, two arbitrators from the North American Export Grain Association, Inc. supplied list of Grain Arbitrators and the Chairperson of the panel from the list of Special Grain Arbitrators or the AAA list of International Arbitrators.

The language of the arbitration shall be English. In disputes involving a "string" of contracts, two or more arbitrations may be consolidated before the same tribunal, at the written request of any party. The tribunal in consolidated arbitrations shall be mindful of differences in terms between the various contracts and in the action of the parties, and vary the award from contract to contract, if indicated. The arbitration award shall be final and binding on the parties and judgment upon such arbitration award may be entered in the Supreme Court of the State of New York or any other court having jurisdiction thereof. Buyer and seller hereby recognize and expressly consent to the jurisdiction over each of them of the American Arbitration Association or its successors, and all of the courts of the State of New York. The parties agree that arbitration awards may be released by the AAA to the North American Export Grain Association, Inc., for distribution to the interested public. Buyer and seller agree that this contract shall be deemed to have been made in New York State and be deemed to be performed there, any reference herein or elsewhere to the contrary notwithstanding.

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**BUYER**

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**SELLER**

# NORTH AMERICAN EXPORT GRAIN ASSOCIATION, INC.

## ADDENDUM NO.1

TO NORTH AMERICAN EXPORT GRAIN ASSOCIATION, INC., F.O.B. CONTRACT NO.2

(REVISED AS OF MARCH 30, 2018)

## LOADING RATE GUARANTY

**This Addendum shall apply if the parties have agreed to be bound by a loading rate guaranty, and provided that lifting under this contract is by one self-trimming bulk carrier only.**

1. Seller guarantees to deliver at an average rate of \_\_\_\_\_ long tons per weather working day of 24 consecutive hours, Saturdays, Sundays and holidays excepted, provided vessel can receive at such rate. Holidays shall be those listed as such in the BIMCO Holiday Calendar and/or in the elevator tariff.  
  
For this purpose, laytime shall commence to count:  
(a) at 0700 hours on the business day following filing of the vessel in accordance with Clause 8 of North American Export Grain Association, Inc., FOB Contract No. 2 ("NAEGA 2"),  

-or-

  
(b) at 0700 hours on the business day following expiration of the preadvise period stipulated in Clause 8 of NAEGA 2, unless an earlier date is agreed to by both parties,  

-or-

  
(c) at 0000 hours on the first business day of the contract delivery period, unless an earlier date is agreed to by both parties, whichever is the latest, whether vessel is in berth or not.
2. Should seller deliver at less than the stipulated rate, seller to pay buyer demurrage at \$ \_\_\_\_\_ for each additional day (or pro-rata for part of day) used. Should seller deliver faster than at the stipulated rate, buyer to pay seller despatch money at half the demurrage rate, i.e., \$ \_\_\_\_\_ per day, for each day (or pro-rata for part of day) of laytime saved.
3. Any overtime work performed by the elevator and/or grain inspection and weighing services and/or stevedores shall be for seller's account if ordered by the elevator or the Port Authority; otherwise, for account of the party ordering the overtime.
4. If Clause 20 of NAEGA 2 has been duly invoked, time shall not count for demurrage purposes while the causes are in effect, until the termination of the causes and/or the resumption of work after the termination of the causes, whichever is later, and for an additional period ("additional period") of equal duration, but such additional period not to exceed 30 days. However, for purposes of settling despatch accounts only, any time lost in delivering through any of the causes, and the additional period, shall be counted as time used in loading.

If during the additional period the vessel nominated under this contract is not loaded in proper rotation but is bypassed by vessels (other than liners) which had filed after the vessel nominated under this contract, seller shall pay to buyer damages equal to the actual working time lost (i.e., weather working days, but Saturdays, Sundays and holidays excluded) to buyer's vessel during the loading of the bypassing vessels, at the demurrage rate stipulated in Clause 2 above. The provisions regarding payment of damages under paragraph (c) of Clause 20 of NAEGA 2 shall not apply to this Addendum.

Notwithstanding the above, if demurrage is already accruing under this Addendum when the causes of prevention or delay commence under Clause 20 of NAEGA 2, demurrage shall continue to accrue as if these causes did not exist. In such case, the preceding paragraph shall be deemed to be deleted.

5. Buyer's or seller's claim under this Addendum shall be accompanied by the statement of facts at loading, signed on behalf of the owner and the charterer or on behalf of the owner and by the supplier, and such other papers as may be necessary to process the claim. If payment is not made within 40 days from date of mailing of properly documented claim, interest shall accrue, starting on the 41<sup>st</sup> day after such mailing, and shall be computed on the final amount due, at the rate of interest stipulated elsewhere in this contract, up to the date of payment of the claim.
6. If vessel nominated under this contract also lifts additional commodities (grain and/or oilseeds), regardless of whether or not such commodities are covered by loading rate guaranties, the following shall apply:
  - (a) For commodities delivered to vessel at the same berth:  
The "time allowed" shall be arrived at by dividing the tonnage loaded under this contract by the daily rate stipulated in Clause 1 above. A calculation of "total time used" for all the commodities loaded at the berth shall be made, in which any such time in excess of the "time allowed" shall be computed as time on demurrage. The "total time used" shall then be pro-rated to the tonnage loaded under this contract. The "time allowed" shall be deducted from this pro-rated figure to arrive at the time on demurrage or time saved under this contract.
  - (b) If the commodities other than those under this contract are delivered at (an) other berth(s) in the same port:  
The waiting time ("waiting time") at the first berth shall be pro-rated among all the contracts for the commodities to be delivered to the

vessel.

The time spent getting to and used at the first berth ("berth time") shall be pro-rated among the contracts loaded at the first berth.

The waiting time at the second berth shall be pro-rated among all remaining contracts for the commodities yet to be delivered to the vessel.

The berth time at the second berth shall be pro-rated among the contracts loaded at the second berth.

Waiting time and berth time for berths subsequent to the second berth shall be treated in a similar manner as for the second berth.

Waiting time shall cease and berth time begin when pilot is on board and vessel lifts anchor in order to proceed to the loading berth.

Berth time shall cease when loading is completed at that berth and waiting time shall begin when vessel drops anchor in waiting area after having sailed from berth.

If no waiting time is involved between berths, berth time at the next berth shall begin when vessel sails from the previous berth.

If, between the time that the vessel is ordered into a berth and the time of completion of loading at that berth, the vessel is ordered into one or more other berths, subsequently incurred waiting time at this (these) other berth(s) shall not count.

- (c) If the commodities other than those under this contract are delivered at (an)other port(s):

The laytime statement shall be prepared as if the vessel had not called at another port. If the commodities under this contract are loaded at the second or a subsequent port, the words "filing of the vessel in accordance with Clause 8 of the North American Export Grain Association, Inc., FOB Contract No.2 ("NAEGA 2")" in Clause 1(a) above shall be deemed to read "presentation of the vessel's passes". If, however, the first and second or subsequent ports have been nominated by the seller of the grain under this contract, laytime for the second and/or subsequent port(s) shall commence upon vessel's arrival at that or the subsequent port(s); except that, if vessel fails inspection at such port(s), laytime shall cease to count until vessel passes.

7. If vessel fails reinspection at the loading berth, laytime shall cease to count until vessel passes.
8. Any trimming costs as well as overtime costs for performing trimming shall be for buyer's account. Any time used for trimming shall not count as laytime and/or shall be exempt from demurrage, unless loading operations are being carried on simultaneously in other holds.
9. Other Conditions:
10. Buyer and seller expressly agree that any controversy or claim arising out of, in connection with or relating to this contract, or the interpretation, performance or breach thereof, shall be settled by arbitration in the City of New York before the American Arbitration Association (AAA), or its successors, in accordance with the International Arbitration Rules of the American Arbitration Association, as those Rules may be in effect at the time of such arbitration proceeding, which Rules are hereby deemed incorporated herein and made a part hereof, and under the laws of the State of New York. The number of arbitrators shall be three.

Each party shall designate one arbitrator from the list of Grain Arbitrators maintained and supplied by the North American Export Grain Association, Inc. The two party appointed arbitrators shall select a third panelist from the list of Special Grain Arbitrators or the AAA list of International Arbitrators and this person shall serve as Chairperson of the panel.

AAA shall maintain a list of Special Grain Arbitrators who are included on the North American Export Grain Association, Inc. list of Grain Arbitrators. If the tribunal is not formed by this procedure, the AAA shall appoint the panel in the same manner, two arbitrators from the North American Export Grain Association, Inc. supplied list of Grain Arbitrators and the Chairperson of the panel from the list of Special Grain Arbitrators or the AAA list of International Arbitrators.

The language of the arbitration shall be English. In disputes involving a "string" of contracts, two or more arbitrations may be consolidated before the same tribunal, at the written request of any party. The tribunal in consolidated arbitrations shall be mindful of differences in terms between the various contracts and in the action of the parties, and vary the award from contract to contract, if indicated. The arbitration award shall be final and binding on the parties and judgment upon such arbitration award may be entered in the Supreme Court of the State of New York or any other court having jurisdiction thereof. Buyer and seller hereby recognize and expressly consent to the jurisdiction over each of them of the American Arbitration Association or its successors, and all of the courts of the State of New York. The parties agree that arbitration awards may be released by the AAA to the North American Export Grain Association, Inc., for distribution to the interested public. Buyer and seller agree that this contract shall be deemed to have been made in New York State and be deemed to be performed there, any reference herein or elsewhere to the contrary notwithstanding.

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BUYER

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SELLER



# Contract No.27



Copyright  
THE GRAIN AND FEED TRADE ASSOCIATION

## CONTRACT FOR CANADIAN AND UNITED STATES OF AMERICA GRAIN IN BULK - CARGOES TALE QUALE – CIF/CIFFO/C&F/C&FFO TERMS

*\* delete/specify as applicable*

Date .....

**SELLERS**.....

**INTERVENING AS BROKERS**.....

**BUYERS**.....

have this day entered into a contract on the following terms and conditions.

### 1. GOODS

A cargo of .....

### 2. QUANTITY..... 5% more or less.

Sellers shall have the option of shipping a further 5% more or less on contract quantity, excess or deficiency over the above 5%, shall be settled at the market price on the date of the last bill of lading, and on the quantity thereof; the value to be fixed by arbitration, unless mutually agreed.

### 3. PRICE AND DESTINATION

At the price (\*per tonne of 1,000 kilograms/\*per ton of 1016 kilograms or 2240 lbs) gross weight of

\*cost, insurance and freight to .....

\*cost, insurance and freight free out to.....

\*cost and freight to.....

\*cost and freight free out to .....

### 4. BROKERAGE.....per tonne, to be paid by Sellers on the mean contract quantity, goods lost or not lost, contract fulfilled or not fulfilled unless such non-fulfilment is due to the cancellation of the contract under the terms of the Prevention of Shipment Clause. Brokerage shall be due on the day shipping documents are exchanged, or if the goods are not appropriated then brokerage shall be due on the 30th consecutive day after the last day for appropriation. Any disputes arising out of this clause shall be referred to arbitration in accordance with the arbitration clause

### 5. QUALITY

**\*Warranted to contain** ..... at time and place of discharge.

**\*Official** ..... certificate of inspection, or certification of inspection of ..... at time and place of loading into the ocean carrying vessel, shall be final as to quality.

Buyers shall not be entitled to reject a tender of a higher grade of the same colour and description.

**\*Sample**, at time and place of shipment about as per sealed sample marked ..... in possession of .....; the word “about” when referring to quality shall mean the equivalent of 0.50% on contract price. Difference in quality shall not entitle Buyers to reject except under the award of arbitrator(s) or board of appeal, as the case may be, referred to in the Arbitration Rules specified in the Arbitration Clause.

**Condition.** Shipment shall be made in good condition. Should the goods arrive out of condition, due regard shall be made for the time of the year in which the shipment took place. The fact of the goods so arriving shall

not necessarily be sufficient proof of an improper shipment.

## **6. PERIOD OF SHIPMENT**

As per bill(s) of lading dated or to be dated .....  
The bill(s) of lading to be dated when the goods are actually on board. Date of the bill(s) of lading shall be accepted as proof of date of shipment in the absence of evidence to the contrary. In any month containing an odd number of days, the middle day shall be accepted as being in both halves of the month.

## **7. PORTS OF SHIPMENT**

From United States and/or Canadian port(s) including Lake Port(s) and Hudson River not above Albany, but excluding Pacific and Hudson Bay port(s).

## **8. SALES BY NAMED VESSELS**

For all sales by named vessel(s), the following shall apply: -

- (a) Position of vessel is mutually agreed between Buyers and Sellers;
- (b) The word "now" to be inserted before the word "classed" in the Ship's Classification Clause;
- (c) Appropriation Clause cancelled if sold "shipped".

## **9. SHIP'S CLASSIFICATION**

Direct or indirect, by first class mechanically self-propelled vessel(s) suitable for the carriage of the contract goods, classed in accordance with the Institute Classification Clause of the International Underwriting Association in force at the time of shipment.

## **10. NOMINATION OF VESSEL(S) FOR CONTRACTS CONCLUDED ON C & F/C&FFO TERMS**

- (a) At a date agreed between the Parties but in any event prior to the commencement of loading, Sellers shall nominate the intended carrying vessel(s) to Buyers.
- (b) Sellers are entitled to substitute the nomination(s) provided that the substituting vessel(s) complies with the terms of this clause

## **11. EXTENSION OF SHIPMENT**

The contract period for shipment, if such be 31 days or less, shall be extended by an additional period of not more than 8 days, provided that Sellers serve notice claiming extension not later than the next business day following the last day of the originally stipulated period. The notice need not state the number of additional days claimed.

Sellers shall make an allowance to Buyers, to be deducted in the invoice from the contract price, based on the number of days by which the originally stipulated period is exceeded, in accordance with the following scale: -

- 1 to 4 additional days, 0.50%;
- 5 or 6 additional days, 1%;
- 7 or 8 additional days 1.50% of the gross contract price.

If, however, after having served notice to Buyers as above, Sellers fail to make shipment within such 8 days, then the contract shall be deemed to have called for shipment during the originally stipulated period plus 8 days, at contract price less 1.50%, and any settlement for default shall be calculated on that basis. If any allowance becomes due under this clause, the contract price shall be deemed to be the original contract price less the allowance and any other contractual differences shall be settled on the basis of such reduced price.

## **12. APPROPRIATION**

(a) Notice of appropriation shall state the vessel's name, the presumed weight shipped, and the date or the presumed date of the bill of lading.

(b) The notice of appropriation shall within 8 consecutive days from the date of the last bill(s) of lading be served by or on behalf of the Shipper direct on his Buyers or on the Selling Agent or Brokers named in the contract. The Non-Business Days Clause shall not apply.

(c) Notice of appropriation shall, within the period stated in sub-clause (b) be served by or on behalf of subsequent Sellers on their Buyers or on the Selling Agent or Brokers named in the contract, but if notice of appropriation is received by subsequent Sellers on the last day or after the period stated in sub-clause (b) from the date of the last bill of lading, their notice of appropriation shall be deemed to be in time if served: -

- (1) On the same calendar day, if received not later than 1600 hours on any business day, or
- (2) Not later than 1600 hours on the next business day, if received after 1600 hours or on a non-business day.

(d) A notice of appropriation served on a Selling Agent or Brokers named in the contract shall be considered an appropriation served on Buyers. A Selling Agent or Brokers receiving a notice of appropriation shall serve like notice of appropriation in accordance with the provisions of this clause. Where the Shipper or



subsequent Sellers serves the notice of appropriation on the Selling Agent, such Selling Agent may serve notice of appropriation either direct to the Buyers or to the Brokers.

(e) The bill of lading date stated in the notice of appropriation shall be for information only and shall not be binding, but in fixing the period laid down by this clause for serving notices of appropriation the actual date of the bill of lading shall prevail.

(f) Every notice of appropriation shall be open to correction of any errors occurring in transmission, provided that the sender is not responsible for such errors, and for any previous error in transmission which has been repeated in good faith.

(g) Should the vessel arrive before receipt of the appropriation and any extra expenses are incurred thereby, such expenses shall be borne by Sellers.

(h) When a valid notice of appropriation has been received by Buyers, it shall not be withdrawn except with their consent.

(i) In the event of less than 95 tonnes being tendered by any one vessel Buyers shall be entitled to refund of any proved extra expenses for sampling, analysis and lighterage incurred thereby at port of discharge.

### 13. PAYMENT

(a) Payment ..... % of invoice amount by cash in.....in exchange for and on presentation of shipping documents.

(b) Shipping documents – shall consist of - 1. Invoice. 2. Full set(s) of on board Bill(s) of Lading and/or Ship's Delivery Order(s) and/or other Delivery Order(s) in negotiable and transferable form. Such other Delivery Order(s) if required by Buyers, to be countersigned by the Ship owners, their Agents or a recognised bank. 3. For CIF/CIFFO terms Policy (ies) and/or Insurance Certificate(s) and/or Letter(s) of Insurance in the currency of the contract. The Letter(s) of Insurance to be certified by a recognised bank if required by Buyers. 4. Other documents as called for under the contract. Buyers agree to accept documents containing the Chamber of Shipping War Deviation Clause and/or other recognised official War Risk Clause.

(c) In the event of shipping documents not being available when called for by Buyers, or on arrival of the vessel at destination, Sellers shall provide other documents or an indemnity entitling Buyers to obtain delivery of the goods and payment shall be made by Buyers in exchange for same, but such payment shall not prejudice Buyers' rights under the contract when shipping documents are eventually available.

(d) Should Sellers fail to present shipping documents or other documents or an indemnity entitling Buyers to take delivery, Buyers shall take delivery under an indemnity provided by themselves and shall pay for the other documents when presented. Any reasonable extra expenses, including the costs of such indemnity or extra charges incurred by reason of the failure of Sellers to provide such documents, shall be borne by Sellers, but such payment shall not prejudice Buyers' rights under the contract when shipping documents are eventually available.

(e) Should shipping documents be presented with an incomplete set of bill(s) of lading or should other shipping documents be missing, payment shall be made provided that delivery of such missing documents is guaranteed, such guarantee to be countersigned, if required by Buyers, by a recognised bank.

(f) Costs of collection shall be for account of Sellers, but if Buyers demand presentation only through a bank of their choice, in that event any additional collection costs shall be borne by Buyers.

(g) No obvious clerical error in the documents shall entitle Buyers to reject them or delay payment, but Sellers shall be responsible for all loss or expense caused to Buyers by reason of such error and Sellers shall on request furnish an approved guarantee in respect thereto.

(h) **Interest.** If there has been unreasonable delay in any payment, interest appropriate to the currency involved shall be charged. If such charge is not mutually agreed, a dispute shall be deemed to exist which shall be settled by arbitration. Otherwise interest shall be payable only where specifically provided in the terms of the contract or by an award of arbitration. The terms of this clause do not override the parties' contractual obligation under sub-clause (a).

### 14. DUTIES, TAXES, LEVIES, ETC.

Sellers shall customs clear the goods for export. All export duties, taxes, levies, etc., present or future, in country of origin, shall be for Sellers' account. All import duties, taxes, levies, etc., present or future, in country of destination, shall be for Buyers' account.

### 15. DISCHARGE

(a) **For CIF/C&F terms,** discharge shall be as fast as the vessel can deliver in accordance with the custom of the port, but in the event of shipment being made under liner bill(s) of lading, discharge shall be as fast as the vessel can deliver in accordance with the terms of the bill(s) of lading. The cost of discharge from hold to ship's rail shall be for Sellers' account, from ship's rail overboard for Buyers' account.

(b) **For C&FFO/CIFFO terms,** the cost of discharge shall be for Buyers' account.

Discharge shall be at the average rate of ..... tonnes per Weather Working Day, Saturdays, Sundays, Holidays Excepted, Unless Used, (WWD SSHEX UU), in which case actual time used to count. Notice of Readiness (NOR) shall be tendered during ordinary office hours on arrival, Whether In Port Or Not, (WIPON), Whether In Berth Or Not, (WIBON), Whether In Free Pratique Or Not, (WIFPON), Whether Customs Cleared Or Not (WCCON) and laytime shall commence at 0800 hours on the next working day. Rate of demurrage/despatch as per Charter Party. In the event of a time charter, the daily hire rate shall be taken as the rate of demurrage, half despatch.

(c) If documents are tendered which do not provide for discharging as above or contain contrary stipulations, Sellers shall be responsible to Buyers for all extra expenses incurred thereby. Discharge by grab(s) shall be permitted unless specifically excluded at time of contract. If shipment is effected by lash barge, then the last day of discharge shall be the day of discharging the last lash barge at the port of destination.

## **16. WEIGHING**

The terms and conditions of GAFTA Weighing Rules No. 123 are deemed to be incorporated into this contract. Unless otherwise agreed, final settlement shall be made on the basis of gross delivered weights at time and place of discharge at Buyers' expense. If the place of destination is outside the port limits, Buyers agree to pay the extra expenses incurred by Sellers or their agents for weighing. No payment shall be made for increase in weight occasioned by water and/or oil during the voyage. If final at time and place of loading, as per GAFTA registered superintendents' certificate at Sellers' choice and expense, (in which case the deficiency clause will not apply).

## **17. DEFICIENCY**

Any deficiency in the bill of lading weight shall be paid for by Sellers and any excess over bill of lading weight shall be paid for by Buyers at contract price.

## **18. SAMPLING, ANALYSIS AND CERTIFICATES OF ANALYSIS**

The terms and conditions of GAFTA Sampling Rules No.124 are deemed to be incorporated into this contract. Samples shall be taken at the time of discharge on or before removal from the ship or quay, unless the parties agree that quality final at loading applies, in which event samples shall be taken at time and place of loading. The parties shall appoint superintendents, for the purposes of supervision and sampling of the goods, from the GAFTA Register of Superintendents. Unless otherwise agreed, analysts shall be appointed from the GAFTA Register of Analysts.

## **19. FUMIGATION**

Where fumigation has been agreed, the terms and conditions of GAFTA Fumigation Rules No. 132 shall be incorporated into this contract.

## **20. INSURANCE**

**20.1 For Contracts Concluded on CIF/CIFFO terms** Sellers shall provide insurance on terms not less favourable than those set out hereunder, and as set out in detail in GAFTA Insurance Terms No.72 viz.:-

### **(a) Risks Covered: -**

Cargo Clauses (WA) with average payable, with 3% franchise or better terms	- Section 2 of Form 72
War Clauses (Cargo)	- Section 4 of Form 72
Strikes, Riots and Civil Commotions Clauses (Cargo)	- Section 5 of Form 72
Australian, Canadian, South African and United States of America Acts	- Section 6 of Form 72

### **(b) Insurers -** The insurance to be effected with first class underwriters and/or companies who are domiciled or carrying on business in the United Kingdom or who, for the purpose of any legal proceedings, accept a British domicile and provide an address for service of process in London, but for whose solvency Sellers shall not be responsible.

### **(c) Insurable Value -** Insured amount to be for not less than 2% over the invoice amount, including freight when freight is payable on shipment or due in any event, ship and/or cargo lost or not lost, and including the amount of any War Risk premium payable by Buyers.

### **(d) Freight Contingency -** When freight is payable on arrival or on right and true delivery of the goods and the insurance does not include the freight, Sellers shall effect insurance upon similar terms, such insurance to attach only as such freight becomes payable, for the amount of the freight plus 2%, until the termination of the risk as provided in the above mentioned clauses, and shall undertake that their policies are so worded that in the case of a particular or general average claim the Buyers shall be put in the same position as if the C.I.F. value plus 2% were insured from the time of shipment.



- (e) Certificates/Policies - Sellers shall give all policies and/or certificates and/or letters of insurance provided for in this contract, (duly stamped if applicable) for original and increased value (if any) for the value stipulated in (c) above. In the event of a certificate of insurance being supplied, it is agreed that such certificate shall be exchanged by Sellers for a policy if and when required and such certificate shall state on its face that it is so exchangeable. If required by Buyers, letter(s) of insurance shall be guaranteed by a recognised Bank, or by any other guarantor who is acceptable to Buyers.
- (f) Total Loss - In the event of total or constructive total loss, or where the amount of the insurance becomes payable in full, the insured amount in excess of 2% over the invoice amount shall be for Sellers' account and the party in possession of the policy (ies) shall collect the amount of insurance and shall thereupon settle with the other party on that basis.
- (g) Currency of Claims - Claims to be paid in the currency of the contract.
- (h) War and Strike Risks Premiums - Any premium in excess of 0.50% to be for account of Buyers. The rate of such insurance not to exceed the rate ruling in London at time of shipment or date of vessel's sailing whichever may be adopted by underwriters. Such excess premium shall be claimed from Buyers, wherever possible, with the Provisional Invoice, but in no case later than the date of vessel's arrival, or not later than 7 consecutive days after the rate has been agreed with underwriters, whichever may be the later, otherwise such claim shall be void unless, in the opinion of Arbitrators, the delay is justifiable. Sellers' obligation to provide War Risk Insurance shall be limited to the terms and conditions in force and generally obtainable in London at time of shipment.
- (i) Where Sellers are responsible for allowances or other payments to Buyers under the contractual terms, (and which risks are also covered by the insurance provided by Sellers), the Buyers, on receipt of settlement, shall immediately return to Sellers the insurance documents originally received from them and shall, if required, subrogate to Sellers all right of claim against the Insurers in respect of such matters.
- 20.2 For Contracts Concluded on C & F/C&FFO terms** Buyers shall be responsible for obtaining insurance cover as per Clause 20.1 above and shall, if required by Sellers, provide evidence to Sellers prior to the commencement of loading that they have obtained suitable cover. If Buyers refuse or fail to provide evidence Sellers are entitled (but not obliged) to cover insurance on the same terms at the Buyers' expense.

## 21. PREVENTION OF SHIPMENT

"Event of Force Majeure" means (a) prohibition of export or other executive or legislative act done by or on behalf of the government of the country of origin or of the territory where the port or ports named herein is/are situate, restricting export, whether partially or otherwise, or (b) blockade, or (c) acts of terrorism, or (d) hostilities, or (e) strike, lockout or combination of workmen, or (f) riot or civil commotion, or (g) breakdown of machinery, or (h) fire, or (i) ice, or (j) Act of God, or (k) unforeseeable and unavoidable impediments to transportation or navigation, or (l) any other event comprehended in the term "force majeure".

Should Sellers' performance of this contract be prevented, whether partially or otherwise, by an Event of Force Majeure, the performance of this contract shall be suspended for the duration of the Event of Force Majeure, provided that Sellers shall have served a notice on Buyers within 7 consecutive days of the occurrence or not later than 21 consecutive days before commencement of the shipment period, whichever is later, with the reasons therefor.

If the Event of Force Majeure continues for 21 consecutive days after the end of the shipment period, then Buyers have the option to cancel the unfulfilled part of the contract by serving a notice on Sellers not later than the first business day after expiry of the 21 day period.

If this option to cancel is not exercised then the contract shall remain in force for an additional period of 14 consecutive days, after which, if the Event of Force Majeure has not ceased, any unfulfilled part of the contract shall be automatically cancelled.

If the Event of Force Majeure ceases before the contract or any unfulfilled part thereof can be cancelled, Sellers shall notify Buyers without delay that the Event of Force Majeure has ceased. Sellers shall be entitled, from the cessation, to as much time as was left for shipment under the contract prior to the occurrence of the Event of Force Majeure. If the time that was left for shipment under the contract is 14 days or less, a period of 14 consecutive days shall be allowed.

The burden of proof lies upon Sellers and the parties shall have no liability to each other for delay and/or non-fulfilment under this clause, provided that Sellers shall have provided to Buyers, if required, satisfactory evidence justifying the delay or non-fulfilment.

291  
292  
293 **22. CIRCLE**

294 Where Sellers re-purchase from their Buyers or from any subsequent buyer the same goods or part  
295 thereof, a circle shall be considered to exist as regards the particular goods so re-purchased, and the  
296 provisions of the Default Clause shall not apply. (For the purpose of this clause the same goods shall  
297 mean goods of the same description, from the same country of origin, of the same quality, and, where  
298 applicable, of the same analysis warranty, for shipment to the same port(s) of destination during the  
299 same period of shipment). Different currencies shall not invalidate the circle. Subject to the terms of  
300 the Prevention of Shipment Clause in the contract, if a circle is established prior to the goods being  
301 appropriated to all parties in the circle, settlement shall be based on the mean contract quantity.  
302 However, where a circle is established after the goods have been appropriated to all parties in the  
303 circle, settlement shall be based on the appropriated quantity. No circle settlement shall apply where  
304 documents have been presented to and paid by one of the parties in the circle. Settlement shall be  
305 made between the parties in the circle by payment by all Buyers to their Sellers of the excess of the  
306 Sellers' invoice amount over the lowest invoice amount in the circle. Payment shall be due not later  
307 than 15 consecutive days after the last day for appropriation, or, should the circle not be ascertained  
308 before the expiry of this time, then payment shall be due not later than 15 consecutive days after the  
309 circle is ascertained. Where the circle includes contracts expressed in different currencies the lowest  
310 invoice amount shall be replaced by the market price on the first day for contractual shipment and  
311 invoices shall be settled between each Buyer and his Seller in the circle by payment of the differences  
312 between the market price and the relative contract price in currency of the contract. All Sellers and  
313 Buyers shall give every assistance to ascertain the circle and when a circle shall have been  
314 ascertained in accordance with this clause same shall be binding on all parties to the circle. As  
315 between Buyers and Sellers in the circle, the non-presentation of documents by Sellers to their  
316 Buyers shall not be considered a breach of contract. Should any party in the circle prior to the due  
317 date of payment commit any act comprehended in the Insolvency Clause of his contract, settlement  
318 by all parties in the circle shall be calculated at the closing out price as provided for in the Insolvency  
319 Clause, which shall be taken as a basis for settlement, instead of the lowest invoice amount in the  
320 circle. In this event respective Buyers shall make payment to their Sellers or respective Sellers shall  
321 make payment to their Buyers of the difference between the closing out price and the contract price.  
322

323 **23. NOTICES**

324 (a) All notices required to be served on the parties pursuant to this contract shall be served in legible form  
325 by E-mail, or by other mutually recognised electronic method of rapid communication, always subject to  
326 the provision that if receipt of any notice is contested, the burden of proof of transmission shall be on the  
327 sender who shall, in the case of a dispute, establish, to the satisfaction of the arbitrator(s) or board of  
328 appeal appointed pursuant to the Arbitration Clause, that the notice was actually transmitted to the  
329 addressee.

330 (b) In case of resales/repurchases, all notices shall be served without delay by sellers on their respective  
331 buyers or vice versa, and any notice received after 1600 hours on a business day shall be deemed, for the  
332 purpose of passing onto their sub buyers and sub sellers, to have been received on the business day  
333 following.

334 (c) A notice to the Brokers or Agent shall be deemed a notice under this contract.  
335

336 **24. NON-BUSINESS DAYS**

337 Saturdays, Sundays and the officially recognised and/or legal holidays of the respective countries and any  
338 days, which GAFTA may declare as non-business days for specific purposes, shall be non-business days.  
339 Should the time limit for doing any act or serving any notice expire on a non-business day, the time so limited  
340 shall be extended until the first business day thereafter. The period of shipment shall not be affected by this  
341 clause.  
342

343 **25. DEFAULT**

344 In default of fulfilment of contract by either party, the following provisions shall apply: -

345 (a) The party other than the defaulter shall, at their discretion have the right, after serving a notice on the  
346 defaulter to sell or purchase, as the case may be, against the defaulter, and such sale or purchase shall  
347 establish the default price.

348 (b) If either party be dissatisfied with such default price or if the right at (a) above is not exercised and  
349 damages cannot be mutually agreed, then the assessment of damages shall be settled by arbitration.

350 (c) The damages payable shall be based on, but not limited to, the difference between the contract price and  
351 either the default price established under (a) above or upon the actual or estimated value of the goods, on the



date of default, established under (b) above.

(d) In no case shall damages include loss of profit on any sub-contracts made by the party defaulted against or others unless the arbitrator(s) or board of appeal, having regard to special circumstances, shall in his/their sole and absolute discretion think fit.

(e) Damages, if any, shall be computed on the quantity appropriated if any but, if no such quantity has been appropriated then on the mean contract quantity, and any option available to either party shall be deemed to have been exercised accordingly in favour of the mean contract quantity.

(f) Default may be declared by Sellers at any time after expiry of the contract period, and the default date shall then be the first business day after the date of Sellers' advice to their Buyers. If default has not already been declared then (notwithstanding the provisions stated in the Appropriation Clause) if notice of appropriation has not been served by the 10th consecutive day after the last day for appropriation laid down in the contract, the Sellers shall be deemed to be in default, and the default date shall then be the first business day thereafter.

## **26. INSOLVENCY**

26.1 If before the fulfilment of this contract, either party shall:

(a) suspend payments;

(b) notify any of the creditors that he is unable to meet debts or that he has suspended or that he is about to suspend payments of his debts;

(c) convene, call or hold a meeting of creditors;

(d) propose either:

(i) a voluntary arrangement; or

(ii) a restructuring plan under Part 26A Companies Act 2006;

(e) be subject to a moratorium pursuant to Part A1 of the Insolvency Act 1986;

(f) be subject to either:

(i) a notice of intention to appoint an administrator; or

(ii) a notice of appointment of an administrator;

(g) have an administration order made;

(h) be subject to a winding up petition;

(i) have a winding up order made;

(j) have a receiver or manager appointed;

(k) convene, call or hold a meeting to go into liquidation (other than for re-construction or amalgamation);

(l) become subject to an interim order under Section 252 of the Insolvency Act 1986; or

(m) have a bankruptcy petition presented against him,

(any of which acts being hereinafter called an "**Act of Insolvency**")

then the party committing such Act of Insolvency shall forthwith serve a notice of the occurrence of such Act of Insolvency on the other party to the contract and upon proof (by either the other party to the contract or the office-holder or other person representing the party committing the Act of Insolvency) that such notice was served within 2 business days of the occurrence of the Act of Insolvency, the contract shall be closed out at the market price ruling on the business day following the serving of the notice.

26.2 If such notice has not been served, then the other party, on learning of the occurrence of the Act of Insolvency, shall have the option of declaring the contract closed out at either the market price on the first business day after the date when such party first learnt of the occurrence of the Act of Insolvency or at the market price ruling on the first business day after the date when the Act of Insolvency occurred.

26.3 In all cases the other party to the contract shall have the option of ascertaining the settlement price on the closing out of the contract by re-purchase or re-sale, and the difference between the contract price and the re-purchase or re-sale price shall be the amount payable or receivable under this contract.

## **27. DOMICILE**

This contract shall be deemed to have been made in England and to be performed in England, notwithstanding any contrary provision, and this contract shall be construed and take effect in accordance with the laws of England. Except for the purpose of enforcing any award made in pursuance of the Arbitration Clause of this contract, the Courts of England shall have exclusive jurisdiction to determine any application for ancillary relief, (save for obtaining security only for the claim or counter-claim) the exercise of the powers of the Court in relation to the arbitration proceedings and any dispute other than a dispute which shall fall within the jurisdiction of arbitrators or board of appeal of the Association pursuant to the Arbitration Clause of this contract. For the purpose of any legal proceedings each party shall be deemed to be ordinarily resident or carrying on business at the offices of The Grain and Feed Trade Association, England, (GAFTA), and any party residing or carrying on business in Scotland shall be held to have prorogated jurisdiction against himself to the English Courts or if in Northern Ireland to have submitted to the jurisdiction and to be bound by the decision of the English Courts. The service of

proceedings upon any such party by leaving the same at the offices of The Grain and Feed Trade Association, together with the posting of a copy of such proceedings to his address outside England, shall be deemed good service, any rule of law or equity to the contrary notwithstanding.

## **28. ARBITRATION**

(a) Any and all disputes arising out of or under this contract or any claim regarding the interpretation or execution of this contract shall be determined by arbitration in accordance with the GAFTA Arbitration Rules, No 125, in the edition current at the date of this contract; such Rules are incorporated into and form part of this Contract and both parties hereto shall be deemed to be fully cognisant of and to have expressly agreed to the application of such Rules.

(b) Neither party hereto, nor any persons claiming under either of them shall bring any action or other legal proceedings against the other in respect of any such dispute, or claim until such dispute or claim shall first have been heard and determined by the arbitrator(s) or a board of appeal, as the case may be, in accordance with the Arbitration Rules and it is expressly agreed and declared that the obtaining of an award from the arbitrator(s) or board of appeal, as the case may be, shall be a condition precedent to the right of either party hereto or of any persons claiming under either of them to bring any action or other legal proceedings against the other of them in respect of any such dispute or claim.

(c) Nothing contained under this Arbitration Clause shall prevent the parties from seeking to obtain security in respect of their claim or counterclaim via legal proceedings in any jurisdiction, provided such legal proceedings shall be limited to applying for and/or obtaining security for a claim or counterclaim, it being understood and agreed that the substantive merits of any dispute or claim shall be determined solely by arbitration in accordance with the GAFTA Arbitration Rules, No 125.

## **29. INTERNATIONAL CONVENTIONS**

The following shall not apply to this contract: -

(a) The Uniform Law on Sales and the Uniform Law on Formation to which effect is given by the Uniform Laws on International Sales Act 1967.

(b) The United Nations Convention on Contracts for the International Sale of Goods of 1980.

(c) The United Nations Convention on Prescription (Limitation) in the International Sale of Goods of 1974 and the amending Protocol of 1980.

(d) Incoterms.

(e) Unless the contract contains any statement expressly to the contrary, a person who is not a party to this contract has no right under the Contract (Rights of Third Parties) Act 1999 to enforce any term of it.

## **30. METHODS OF ANALYSIS**

Unless otherwise agreed, the terms and conditions of GAFTA Methods of Analysis No. 130 are deemed to be incorporated into this contract.

Sellers ..... Buyers .....

Printed in England and issued by

**GAFTA**  
**THE GRAIN AND FEED TRADE ASSOCIATION**  
**9 LINCOLN'S INN FIELDS, LONDON WC2A 3BP**

# Contract No.30



Copyright  
THE GRAIN AND FEED TRADE ASSOCIATION

## CONTRACT FOR CANADIAN AND UNITED STATES OF AMERICA GRAIN IN BULK PARCELS TALE QUALE – CIF/CIFFO/C&F/C&FFO TERMS

*\* delete/specify as applicable*

Date.....

**1. SELLERS**.....

**2. INTERVENING AS BROKERS**.....

**3. BUYERS**.....

have this day entered into a contract on the following terms and conditions.

**1. GOODS**.....

**2. QUANTITY** ..... 2% more or less.

Sellers shall have the option of shipping a further 3%, more or less on contract quantity, excess or deficiency over the above 2%, shall be settled at the market price on the date of bill of lading, and on the quantity thereof; the value to be fixed by arbitration, unless mutually agreed. In the event of more than one shipment being made, each shipment shall be considered a separate contract, but the margin on the mean quantity sold shall not be affected thereby.

**3. PRICE AND DESTINATION**

At the price (\*per tonne of 1,000 kilograms/\*per ton of 1016 kilograms or 2240 lbs) gross weight of

.....  
\*cost, insurance and freight to .....

\*cost, insurance and freight free out to.....

\*cost and freight to.....

\*cost and freight free out to .....

**4. BROKERAGE**.....per tonne, to be paid by Sellers on the mean contract quantity, goods lost or not lost, contract fulfilled or not fulfilled unless such non-fulfilment is due to the cancellation of the contract under the terms of the Prevention of Shipment Clause. Brokerage shall be due on the day shipping documents are exchanged, or if the goods are not appropriated then brokerage shall be due on the 30th consecutive day after the last day for appropriation. Any disputes arising out of this clause shall be referred to arbitration in accordance with the arbitration clause.

**5. QUALITY**

\* **Warranted to contain**..... at time and place of discharge.

\* **Official**..... certificate of inspection, or certification of inspection of ..... at time and place of loading into the ocean carrying vessel, shall be final as to quality. Buyers shall not be entitled to reject a tender of a higher grade of the same colour and description.

\***Sample**, at time and place of shipment about as per sealed sample marked ..... in possession of .....; the word "about" when referring to quality shall mean the equivalent of 0.50% on contract price. Difference in quality shall not entitle Buyers to reject except under the award of arbitrator(s) or board of



appeal, as the case may be, referred to in the Arbitration Rules specified in the Arbitration Clause.

**Condition.** Shipment shall be made in good condition. Should the goods arrive out of condition, due regard shall be made for the time of the year in which the shipment took place. The fact of the goods so arriving shall not necessarily be sufficient proof of an improper shipment.

## 6. PERIOD OF SHIPMENT

As per bill(s) of lading dated or to be dated .....  
The bill(s) of lading to be dated when the goods are actually on board. Date of the bill(s) of lading shall be accepted as proof of date of shipment in the absence of evidence to the contrary. In any month containing an odd number of days, the middle day shall be accepted as being in both halves of the month.

## 7. PORTS OF SHIPMENT

From United States and/or Canadian port(s) including Lake Port(s) and Hudson River not above Albany, but excluding Pacific and Hudson Bay port(s).

## 8. SALES BY NAMED VESSELS

For all sales by named vessels, the following shall apply: -

- (a) Position of vessel is mutually agreed between Buyers and Sellers;
- (b) The word "now" to be inserted before the word "classed" in the Ship's Classification Clause;
- (c) Appropriation Clause cancelled if sold "shipped".

## 9. SHIP'S CLASSIFICATION

Shipment by first class mechanically self-propelled vessel(s) suitable for the carriage of the contract goods, classed in accordance with the Institute Classification Clause of the International Underwriting Association in force at the time of shipment, excluding tankers and vessels which are either classified in Lloyd's Register or described in Lloyd's Shipping Index as "Ore/Oil" vessels

## 10. NOMINATION OF VESSEL(S) FOR CONTRACTS CONCLUDED ON C & F/C&FFO TERMS

- (a) At a date agreed between the Parties but in any event prior to the commencement of loading, Sellers shall nominate the intended carrying vessel(s) to Buyers.
- (b) Sellers are entitled to substitute the nomination(s) provided that the substituting vessel(s) complies with the terms of this clause.

## 11. EXTENSION OF SHIPMENT

The contract period for shipment, if such be 31 days or less, shall be extended by an additional period of not more than 8 days, provided that Sellers serve notice claiming extension not later than the next business day following the last day of the originally stipulated period. The notice need not state the number of additional days claimed.

Sellers shall make an allowance to Buyers, to be deducted in the invoice from the contract price, based on the number of days by which the originally stipulated period is exceeded, in accordance with the following scale: -

- 1 to 4 additional days, 0.50%;
- 5 or 6 additional days, 1%;
- 7 or 8 additional days 1.50% of the gross contract price.

If, however, after having served notice to Buyers as above, Sellers fail to make shipment within such 8 days, then the contract shall be deemed to have called for shipment during the originally stipulated period plus 8 days, at contract price less 1.50%, and any settlement for default shall be calculated on that basis. If any allowance becomes due under this clause, the contract price shall be deemed to be the original contract price less the allowance and any other contractual differences shall be settled on the basis of such reduced price.

## 12. APPROPRIATION

- (a) Notice of appropriation shall state the vessel's name, the presumed weight shipped, and the date or the presumed date of the bill of lading.
- (b) The notice of appropriation shall within 8 consecutive days from the date of the bill(s) of lading be served by or on behalf of the Shipper direct on his Buyers or on the Selling Agent or Brokers named in the contract. The Non-Business Days Clause shall not apply.
- (c) Notice of appropriation shall, within the period stated in sub-clause (b) be served by or on behalf of subsequent Sellers on their Buyers or on the Selling Agent or Brokers named in the contract, but if notice of appropriation is received by subsequent Sellers on the last day or after the period stated in sub-clause (b) from the date of the bill of lading, their notice of appropriation shall be deemed to be in time if served: -
  - (1) On the same calendar day, if received not later than 1600 hours on any business day, or

(2) Not later than 1600 hours on the next business day, if received after 1600 hours or on a non-business day.

(d) A notice of appropriation served on a Selling Agent or Brokers named in the contract shall be considered an appropriation served on Buyers. A Selling Agent or Brokers receiving a notice of appropriation shall serve like notice of appropriation in accordance with the provisions of this clause. Where the Shipper or subsequent Sellers serves the notice of appropriation on the Selling Agent, such Selling Agent may serve notice of appropriation either direct to the Buyers or to the Brokers.

(e) The bill of lading date stated in the notice of appropriation shall be for information only and shall not be binding, but in fixing the period laid down by this clause for serving notices of appropriation the actual date of the bill of lading shall prevail.

(f) Every notice of appropriation shall be open to correction of any errors occurring in transmission, provided that the sender is not responsible for such errors, and for any previous error in transmission which has been repeated in good faith.

(g) Should the vessel arrive before receipt of the appropriation and any extra expenses is incurred thereby, such expenses shall be borne by Sellers.

(h) When a valid notice of appropriation has been received by Buyers, it shall not be withdrawn except with their consent.

(i) In the event of less than 95 tonnes being tendered by any one vessel Buyers shall be entitled to refund of any proved extra expenses for sampling, analysis and lighterage incurred thereby at port of discharge.

### 13. PAYMENT

(a) **Payment** ..... % of invoice amount by cash in ..... in exchange for and on presentation of shipping documents.

(b) **Shipping documents** – shall consist of - 1. Invoice. 2. Full set(s) of on board Bill(s) of Lading and/or Ship's Delivery Order(s) and/or other Delivery Order(s) in negotiable and transferable form. Such other Delivery Order(s) if required by Buyers, to be countersigned by the Shipowners, their Agents or a recognised bank. 3. For CIF/CIFFO terms Policy (ies) and/or Insurance Certificate(s) and/or Letter(s) of Insurance in the currency of the contract. The Letter(s) of Insurance to be certified by a recognised bank if required by Buyers. 4. Other documents as called for under the contract. Buyers agree to accept documents containing the Chamber of Shipping War Deviation Clause and/or other recognised official War Risk Clause.

(c) In the event of shipping documents not being available when called for by Buyers, or on arrival of the vessel at destination, Sellers shall provide other documents or an indemnity entitling Buyers to obtain delivery of the goods and payment shall be made by Buyers in exchange for same, but such payment shall not prejudice Buyers' rights under the contract when shipping documents are eventually available.

(d) Should Sellers fail to present shipping documents or other documents or an indemnity entitling Buyers to take delivery,

Buyers shall take delivery under an indemnity provided by themselves and shall pay for the other documents when presented. Any reasonable extra expenses, including the costs of such indemnity or extra charges incurred by reason of the failure of Sellers to provide such documents, shall be borne by Sellers, but such payment shall not prejudice Buyers' rights under the contract when shipping documents are eventually available.

(e) Should shipping documents be presented with an incomplete set of bill(s) of lading or should other shipping documents be missing, payment shall be made provided that delivery of such missing documents is guaranteed, such guarantee to be countersigned, if required by Buyers, by a recognised bank.

(f) Costs of collection shall be for account of Sellers, but if Buyers demand presentation only through a bank of their choice, in that event any additional collection costs shall be borne by Buyers.

(g) No obvious clerical error in the documents shall entitle Buyers to reject them or delay payment, but Sellers shall be

responsible for all loss or expense caused to Buyers by reason of such error and Sellers shall on request furnish an approved guarantee in respect thereto.

(h) **Interest.** If there has been unreasonable delay in any payment, interest appropriate to the currency involved shall be charged. If such charge is not mutually agreed, a dispute shall be deemed to exist which shall be settled by arbitration. Otherwise interest shall be payable only where specifically provided in the terms of the contract or by an award of arbitration. The terms of this clause do not override the parties' contractual obligation under sub-clause (a).

### 14. DUTIES, TAXES, LEVIES, ETC.

Sellers shall customs clear the goods for export. All export duties, taxes, levies, etc., present or future, in country of origin, shall be for Sellers' account. All import duties, taxes, levies, etc., present or future, in country of destination, shall be for Buyers' account.

169  
170 **15. DISCHARGE**

171 (a) **For CIF/C&F terms**, discharge shall be as fast as the vessel can deliver in accordance with the  
172 custom of the port, but in the event of shipment being made under liner bill(s) of lading, discharge  
173 shall be as fast as the vessel can deliver in accordance with the terms of the bill(s) of lading. The cost  
174 of discharge from hold to ship's rail shall be for Sellers' account, from ship's rail overboard for  
175 Buyers' account.

176 (b) **For C&FFO/CIFFO terms**, the cost of discharge shall be for Buyers' account.

177  
178 Discharge shall be at the average rate of ..... tonnes per Weather Working Day, Saturdays,  
179 Sundays, Holidays Excepted, Unless Used, (WWD SSheX UU), in which case actual time used to count.

180 Notice of Readiness (NOR) shall be tendered during ordinary office hours on arrival, Whether In Port  
181 Or Not, (WIPON), Whether In Berth Or Not, (WIBON), Whether In Free Pratique Or Not, (WIFPON),  
182 Whether Customs Cleared Or Not (WCCON) and laytime shall commence at 0800 hours on the next  
183 working day. Rate of demurrage/despatch as per Charter Party. In the event of a time charter, the  
184 daily hire rate shall be taken as the rate of demurrage, half despatch.

185 (c) If documents are tendered which do not provide for discharging as above or contain contrary  
186 stipulations, Sellers shall be responsible to Buyers for all extra expenses incurred thereby. Discharge  
187 by grab(s) shall be permitted unless specifically excluded at time of contract. If shipment is effected  
188 by lash barge, then the last day of discharge shall be the day of discharging the last lash barge at the  
189 port of destination.

190  
191 **16. SAMPLING, ANALYSIS AND CERTIFICATES OF ANALYSIS**

192 The terms and conditions of GAFTA Sampling Rules No.124 are deemed to be incorporated into this  
193 contract. Samples shall be taken at the time of discharge on or before removal from the ship or quay, unless  
194 the parties agree that quality final at loading applies, in which event samples shall be taken at time and  
195 place or loading. The parties shall appoint superintendents, for the purposes of supervision and sampling of  
196 the goods, from the GAFTA Register of Superintendents. Unless otherwise agreed, analysts shall be  
197 appointed from the GAFTA Register of Analysts.

198  
199 **17. FUMIGATION**

200 Where fumigation has been agreed, the terms and conditions of GAFTA Fumigation Rules No. 132  
201 shall be incorporated into this contract.

202  
203 **18. WEIGHING**

204 The terms and conditions of GAFTA Weighing Rules No.123 are deemed to be incorporated into this  
205 contract. Unless otherwise agreed, final settlement shall be made on the basis of gross delivered weights at  
206 time and place of discharge at Buyers' expense. If the place of destination is outside the port limits, Buyers  
207 agree to pay the extra expenses incurred by Sellers or their agents for weighing. No payment shall be made  
208 for increase in weight occasioned by water and/or oil during the voyage. If final at time and place of  
209 loading, as per GAFTA registered superintendents' certificate at Sellers' choice and expense, (in which case  
210 the Deficiency Clause will not apply).

211  
212 **19. DEFICIENCY**

213 Any deficiency in the bill of lading weight shall be paid for by Sellers and any excess over bill of lading  
214 weight shall be paid for by buyers at contract price, (unless the Pro-rata clause applies).

215  
216 **19. PRO RATA**

217 (a) Should any of the above mentioned quantity form part of a larger quantity of the same or a different  
218 period of shipment of bags of the same mark, or of a similar quality, whether in bags or bulk or whether  
219 destined to more than one port, no separation or distinction shall be necessary.

220 (b) All loose collected, damaged goods and sweepings shall be shared by and apportioned pro-rata in kind  
221 between the various Receivers thereof at the port of discharge named in the contract, buying under contracts  
222 containing this clause. In the event of this not being practicable or any of them receiving more or less than his  
223 pro-rata share or apportionment, he shall settle with the other(s) on a pro-rata basis in cash at the market  
224 price and each Receiver shall bear his proportion of the depreciation in market value. The pro-rata statement  
225 shall be established by the Sellers or their Representatives in conjunction with the Receivers or their  
226 Representatives.

227 (c) The above pro-rata apportionment between Receivers shall have no bearing on the establishment of final  
228 invoices with Sellers and for the purpose of these invoices, the total quantity of loose collected, damaged  
229 goods and sweepings shall be regarded as delivered to those Receivers who did not receive their full invoiced



quantity.

(d) In the case of excess or deficiency, the difference between the invoiced and the total delivered quantity shall be settled at the market price by final invoices to be rendered by Receivers, who have received more or less than that paid for, to their immediate Sellers without taking into consideration the above pro-rata apportionment between Receivers.

(e) If an excess quantity is delivered to one or more Receiver and a deficient quantity is delivered to one or more Receiver, the excess and deficiency shall be settled between them at the market price. Invoices shall be established with immediate Sellers for any balance resulting from this settlement.

(f) All Shippers, Sellers and Buyers of any part of such larger quantity as aforesaid under contracts containing this clause shall be deemed to have entered into mutual agreements with one another to the above effect, and to agree to submit to arbitration all questions and claims between them or any of them in regard to the execution of this clause as aforesaid in accordance with the Arbitration Clause of this contract. Sellers and Buyers shall give all reasonable assistance in execution of this clause. All Sellers shall be responsible for the settlement by the respective Buyers in accordance with this clause within a reasonable time.

(g) The market price wherever mentioned in this clause shall be the market price on the last day of discharge of the vessel in the port of destination, such price to be fixed by arbitration unless mutually agreed.

(h) In the event of this clause being brought into operation, any allowances payable in respect of condition, or quality, or under any of the other guarantees contained in this contract, shall be based upon the actual weight received by the Buyers and not on the pro-rata weight.

(i) In the event of any conflict in terms of apportionment applicable to the port of discharge the methods published by The Grain and Feed Trade Association shall, where applicable, take precedence over sub-clauses (b) to (h) above.

(j) In the event that sub-clause (a) applies or that the goods subsequently become co-mingled, and that the goods were shipped by more than one Shipper and destined for one or more ports of discharge then, after the adjustment between Receivers under the terms of this clause, the Shippers shall settle pro-rata between themselves in proportion to their bill of lading quantities. Such settlements shall be made in cash and in the event of two or more discharging ports being involved, then the settlement price shall be the average of the market prices on the last day of discharge in the respective ports.

## 20. INSURANCE

**20.1 For Contracts Concluded on CIF/CIFFO terms** Sellers shall provide insurance on terms not less favourable than those set out hereunder, and as set out in detail in GAFTA Insurance Terms No.72 viz.:-

(a) Risks Covered: -

Cargo Clauses (WA) with average payable, with 3% franchise or better terms - Section 2 of Form 72

War Clauses (Cargo) - Section 4 of Form 72

Strikes, Riots and Civil Commotions Clauses (Cargo) - Section 5 of Form 72

Australian, Canadian, South African and United States of America Acts - Section 6 of Form 72

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(b) Insurers - The insurance to be effected with first class underwriters and/or companies who are domiciled or carrying on business in the United Kingdom or who, for the purpose of any legal proceedings, accept a British domicile and provide an address for service of process in London, but for whose solvency Sellers shall not be responsible.

(c) Insurable Value - Insured amount to be for not less than 2% over the invoice amount, including freight when freight is payable on shipment or due in any event, ship and/or cargo lost or not lost, and including the amount of any War Risk premium payable by Buyers.

(d) Freight Contingency - When freight is payable on arrival or on right and true delivery of the goods and the insurance does not include the freight, Sellers shall effect insurance upon similar terms, such insurance to attach only as such freight becomes payable, for the amount of the freight plus 2%, until the termination of the risk as provided in the above mentioned clauses, and shall undertake that their policies are so worded that in the case of a particular or general average claim the Buyers shall be put in the same position as if the C.I.F. value plus 2% were insured from the time of shipment.

(e) Certificates/Policies - Sellers shall give all policies and/or certificates and/or letters of insurance provided for in this contract, (duly stamped if applicable) for original and increased value (if any) for the value stipulated in (c) above. In the event of a certificate of insurance being supplied, it is agreed that such certificate shall be exchanged by Sellers for a policy if and when required and such certificate shall state on its face that it is so exchangeable. If required by Buyers, letter(s) of insurance shall be guaranteed by a recognised bank, or by any other guarantor who is acceptable to Buyers.

(f) Total Loss - In the event of total or constructive total loss, or where the amount of the insurance becomes payable in full, the insured amount in excess of 2% over the invoice amount shall be for Sellers' account and the party in possession of the policy (ies) shall collect the amount of insurance and shall thereupon settle with

the other party on that basis.

(g) Currency of Claims - Claims to be paid in the currency of the contract.

(h) War and Strike Risks Premiums - Any premium in excess of 0.50% to be for account of Buyers. The rate of such insurance not to exceed the rate ruling in London at time of shipment or date of vessel's sailing whichever may be adopted by underwriters. Such excess premium shall be claimed from Buyers, wherever possible, with the Provisional Invoice, but in no case later than the date of vessel's arrival, or not later than 7 consecutive days after the rate has been agreed with underwriters, whichever may be the later, otherwise such claim shall be void unless, in the opinion of Arbitrators, the delay is justifiable. Sellers' obligation to provide War Risk Insurance shall be limited to the terms and conditions in force and generally obtainable in London at time of shipment.

(i) Where Sellers are responsible for allowances or other payments to Buyers under the contractual terms, (and which risks are also covered by the insurance provided by Sellers), the Buyers, on receipt of settlement, shall immediately return to Sellers the insurance documents originally received from them and shall, if required, subrogate to Sellers all right of claim against the Insurers in respect of such matters.

**20.2 For Contracts Concluded on C & F/C&FFO terms** Buyers shall be responsible for obtaining insurance cover as per Clause 20.1 above and shall, if required by Sellers, provide evidence to Sellers prior to the commencement of loading that they have obtained suitable cover. If Buyers refuse or fail to provide evidence Sellers are entitled (but not obliged) to cover insurance on the same terms at the Buyers' expense

## 21. PREVENTION OF SHIPMENT

"Event of Force Majeure" means (a) prohibition of export or other executive or legislative act done by or on behalf of the government of the country of origin or of the territory where the port or ports named herein is/are situate, restricting export, whether partially or otherwise, or (b) blockade, or (c) acts of terrorism, or (d) hostilities, or (e) strike, lockout or combination of workmen, or (f) riot or civil commotion, or (g) breakdown of machinery, or (h) fire, or (i) ice, or (j) Act of God, or (k) unforeseeable and unavoidable impediments to transportation or navigation, or (l) any other event comprehended in the term "force majeure".

Should Sellers' performance of this contract be prevented, whether partially or otherwise, by an Event of Force Majeure, the performance of this contract shall be suspended for the duration of the Event of Force Majeure, provided that Sellers shall have served a notice on Buyers within 7 consecutive days of the occurrence or not later than 21 consecutive days before commencement of the shipment period, whichever is later, with the reasons therefor.

If the Event of Force Majeure continues for 21 consecutive days after the end of the shipment period, then Buyers have the option to cancel the unfulfilled part of the contract by serving a notice on Sellers not later than the first business day after expiry of the 21 day period.

If this option to cancel is not exercised then the contract shall remain in force for an additional period of 14 consecutive days, after which, if the Event of Force Majeure has not ceased, any unfulfilled part of the contract shall be automatically cancelled.

If the Event of Force Majeure ceases before the contract or any unfulfilled part thereof can be cancelled, Sellers shall notify Buyers without delay that the Event of Force Majeure has ceased. Sellers shall be entitled, from the cessation, to as much time as was left for shipment under the contract prior to the occurrence of the Event of Force Majeure. If the time that was left for shipment under the contract is 14 days or less, a period of 14 consecutive days shall be allowed.

The burden of proof lies upon Sellers and the parties shall have no liability to each other for delay and/or non-fulfilment under this clause, provided that Sellers shall have provided to Buyers, if required, satisfactory evidence justifying the delay or non-fulfilment.

## 22. CIRCLE

Where Sellers re-purchase from their Buyers or from any subsequent buyer the same goods or part thereof, a circle shall be considered to exist as regards the particular goods so re-purchased, and the provisions of the Default Clause shall not apply. (For the purpose of this clause the same goods shall mean goods of the same description, from the same country of origin, of the same quality, and, where applicable, of the same analysis warranty, for shipment to the same port(s) of destination during the same period of shipment). Different currencies shall not invalidate the circle. Subject to the terms of the Prevention of Shipment Clause in the contract, if a circle is established prior to the goods being appropriated to all parties in the circle, settlement shall be based on the mean contract quantity.

However, where a circle is established after the goods have been appropriated to all parties in the circle, settlement shall be based on the appropriated quantity. No circle settlement shall apply where documents have been presented to and paid by one of the parties in the circle. Settlement shall be made between the parties in the circle by payment by all Buyers to their Sellers of the excess of the Sellers' invoice amount over the lowest invoice amount in the circle. Payment shall be due not later than 15 consecutive days after the last day for appropriation, or, should the circle not be ascertained before the expiry of this time, then payment shall be due not later than 15 consecutive days after the circle is ascertained. Where the circle includes contracts expressed in different currencies the lowest invoice amount shall be replaced by the market price on the first day for contractual shipment and invoices shall be settled between each Buyer and his Seller in the circle by payment of the differences between the market price and the relative contract price in currency of the contract. All Sellers and Buyers shall give every assistance to ascertain the circle and when a circle shall have been ascertained in accordance with this clause same shall be binding on all parties to the circle. As between Buyers and Sellers in the circle, the non-presentation of documents by Sellers to their Buyers shall not be considered a breach of contract. Should any party in the circle prior to the due date of payment commit any act comprehended in the Insolvency Clause of his contract, settlement by all parties in the circle shall be calculated at the closing out price as provided for in the Insolvency Clause, which shall be taken as a basis for settlement, instead of the lowest invoice amount in the circle. In this event respective Buyers shall make payment to their Sellers or respective Sellers shall make payment to their Buyers of the difference between the closing out price and the contract price.

## **23. NOTICES**

(a) All notices required to be served on the parties pursuant to this contract shall be served in legible form by E-mail, or by other mutually recognised electronic method of rapid communication, always subject to the provision that if receipt of any notice is contested, the burden of proof of transmission shall be on the sender who shall, in the case of a dispute, establish, to the satisfaction of the arbitrator(s) or board of appeal appointed pursuant to the Arbitration Clause, that the notice was actually transmitted to the addressee.

(b) In case of resales/repurchases, all notices shall be served without delay by sellers on their respective buyers or vice versa, and any notice received after 1600 hours on a business day shall be deemed, for the purpose of passing onto their sub buyers and sub sellers, to have been received on the business day following.

(c) A notice to the Brokers or Agent shall be deemed a notice under this contract.

## **24. NON-BUSINESS DAYS**

Saturdays, Sundays and the officially recognised and/or legal holidays of the respective countries and any days, which GAFTA may declare as non-business days for specific purposes, shall be non-business days. Should the time limit for doing any act or serving any notice expire on a non-business day, the time so limited shall be extended until the first business day thereafter. The period of shipment shall not be affected by this clause.

## **25. DEFAULT**

In default of fulfilment of contract by either party, the following provisions shall apply:-

(a) The party other than the defaulter shall, at their discretion have the right, after serving a notice on the defaulter, to sell or purchase, as the case may be, against the defaulter, and such sale or purchase shall establish the default price.

(b) If either party be dissatisfied with such default price or if the right at (a) above is not exercised and damages cannot be mutually agreed, then the assessment of damages shall be settled by arbitration.

(c) The damages payable shall be based on, but not limited to, the difference between the contract price and either the default

price established under (a) above or upon the actual or estimated value of the goods, on the date of default, established under (b) above.

(d) In no case shall damages include loss of profit on any sub-contracts made by the party defaulted against or others unless the arbitrator(s) or board of appeal, having regard to special circumstances, shall in his/their sole and absolute discretion think fit.

(e) Damages, if any, shall be computed on the quantity appropriated if any but, if no such quantity has been appropriated then on the mean contract quantity, and any option available to either party shall be deemed to have been exercised accordingly in favour of the mean contract quantity.

(f) Default may be declared by Sellers at any time after expiry of the contract period, and the default date shall then be the first business day after the date of Sellers' advice to their Buyers. If default has not already been declared then (notwithstanding the provisions stated in the Appropriation Clause) if notice of appropriation has not been served by the 10th consecutive day after the last day for appropriation laid down in the contract, the Sellers shall be deemed to be in default and the default date shall then be the first business day thereafter.



## 26. INSOLVENCY

26.1 If before the fulfilment of this contract, either party shall:

- (a) suspend payments;
- (b) notify any of the creditors that he is unable to meet debts or that he has suspended or that he is about to suspend payments of his debts;
- (c) convene, call or hold a meeting of creditors;
- (d) propose either:
  - (i) a voluntary arrangement; or
  - (ii) a restructuring plan under Part 26A Companies Act 2006;
- (e) be subject to a moratorium pursuant to Part A1 of the Insolvency Act 1986;
- (f) be subject to either:
  - (i) a notice of intention to appoint an administrator; or
  - (ii) a notice of appointment of an administrator;
- (g) have an administration order made;
- (h) be subject to a winding up petition;
- (i) have a winding up order made;
- (j) have a receiver or manager appointed;
- (k) convene, call or hold a meeting to go into liquidation (other than for re-construction or amalgamation);
- (l) become subject to an interim order under Section 252 of the Insolvency Act 1986; or
- (m) have a bankruptcy petition presented against him,  
(any of which acts being hereinafter called an “**Act of Insolvency**”)

then the party committing such Act of Insolvency shall forthwith serve a notice of the occurrence of such Act of Insolvency on the other party to the contract and upon proof (by either the other party to the contract or the office-holder or other person representing the party committing the Act of Insolvency) that such notice was served within 2 business days of the occurrence of the Act of Insolvency, the contract shall be closed out at the market price ruling on the business day following the serving of the notice.

26.2 If such notice has not been served, then the other party, on learning of the occurrence of the Act of Insolvency, shall have the option of declaring the contract closed out at either the market price on the first business day after the date when such party first learnt of the occurrence of the Act of Insolvency or at the market price ruling on the first business day after the date when the Act of Insolvency occurred.

26.3 In all cases the other party to the contract shall have the option of ascertaining the settlement price on the closing out of the contract by re-purchase or re-sale, and the difference between the contract price and the re-purchase or re-sale price shall be the amount payable or receivable under this contract.

## 27. DOMICILE

This contract shall be deemed to have been made in England and to be performed in England, notwithstanding any contrary provision, and this contract shall be construed and take effect in accordance with the laws of England. Except for the purpose of enforcing any award made in pursuance of the Arbitration Clause of this contract, the Courts of England shall have exclusive jurisdiction to determine any application for ancillary relief, (save for obtaining security only for the claim or counter-claim), the exercise of the powers of the Court in relation to the arbitration proceedings and any dispute other than a dispute which shall fall within the jurisdiction of arbitrators or board of appeal of the Association pursuant to the Arbitration Clause of this contract. For the purpose of any legal proceedings each party shall be deemed to be ordinarily resident or carrying on business at the offices of The Grain and Feed Trade Association, England, (GAFTA), and any party residing or carrying on business in Scotland shall be held to have prorogated jurisdiction against himself to the English Courts or if in Northern Ireland to have submitted to the jurisdiction and to be bound by the decision of the English Courts. The service of proceedings upon any such party by leaving the same at the offices of The Grain and Feed Trade Association, together with the posting of a copy of such proceedings to his address outside England, shall be deemed good service, any rule of law or equity to the contrary notwithstanding.

## 28. ARBITRATION

(a) Any and all disputes arising out of or under this contract or any claim regarding the interpretation or execution of this contract shall be determined by arbitration in accordance with the GAFTA Arbitration Rules, No 125, in the edition current at the date of this contract; such Rules are incorporated into and form part of this Contract and both parties hereto shall be deemed to be fully cognisant of and to have expressly agreed to the application of such Rules.

(b) Neither party hereto, nor any persons claiming under either of them shall bring any action or other legal

proceedings against the other in respect of any such dispute, or claim until such dispute or claim shall first have been heard and determined by the arbitrator(s) or a board of appeal, as the case may be, in accordance with the Arbitration Rules and it is expressly agreed and declared that the obtaining of an award from the arbitrator(s) or board of appeal, as the case may be, shall be a condition precedent to the right of either party hereto or of any persons claiming under either of them to bring any action or other legal proceedings against the other of them in respect of any such dispute or claim.

(c) Nothing contained under this Arbitration Clause shall prevent the parties from seeking to obtain security in respect of their claim or counterclaim via legal proceedings in any jurisdiction, provided such legal proceedings shall be limited to applying for and/or obtaining security for a claim or counterclaim, it being understood and agreed that the substantive merits of any dispute or claim shall be determined solely by arbitration in accordance with the GAFTA Arbitration Rules, No 125.

## **29. INTERNATIONAL CONVENTIONS**

The following shall not apply to this contract: -

(a) The Uniform Law on Sales and the Uniform Law on Formation to which effect is given by the Uniform Laws on International Sales Act 1967.

(b) the United Nations Convention on Contracts for the International Sale of Goods of 1980.

(c) The United Nations Convention on Prescription (Limitation) in the International Sale of Goods of 1974 and the amending Protocol of 1980.

(d) Incoterms.

(e) Unless the contract contains any statement expressly to the contrary, a person who is not a party to this contract has no right under the Contract (Rights of Third Parties) Act 1999 to enforce any term of it.

## **30. METHODS OF ANALYSIS**

Unless otherwise agreed, the terms and conditions of GAFTA Methods of Analysis No. 130 are deemed to be incorporated into this contract.

Sellers ..... Buyers .....

Printed in England and issued by

**GAFTA**  
**THE GRAIN AND FEED TRADE ASSOCIATION**  
**9 LINCOLN'S INN FIELDS, LONDON WC2A 3BP**



# ***Arbitration Rules No.125***

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## **ARBITRATION RULES NO. 125**

Any dispute arising out of a contract or arbitration agreement, which incorporates or refers to these Rules, shall be referred to arbitration, and arbitrator(s) or board of appeal, as the case may be, will proceed to determine all issues put before them, in accordance with the following provisions: -

### **1. PRELIMINARY**

- 1.1** The provisions of the Arbitration Act 1996, and of any statutory amendment, modification or re-enactment thereof for the time being in force, shall apply to every arbitration and/or appeal under these Rules save insofar as such provisions are expressly modified by, or are inconsistent with, these Rules.
- 1.2** The juridical seat of the arbitration shall be, and is hereby designated pursuant to section 4 of the Arbitration Act 1996 as, England.
- 1.3** Any oral hearing fixed in an arbitration shall take place at a place designated by The Grain and Feed Trade Association (Gafta), London, or (but without prejudice to Rules 1.1 and 1.2 above), elsewhere if agreed by the parties in writing.

### **2. PROCEDURE AND TIME LIMITS FOR CLAIMING ARBITRATION**

The claimant shall serve on the respondent a notice stating his intention to refer a dispute to arbitration within the following time limits. (The appointment of arbitrators shall be in accordance with Rule 3).

#### **2.1 When Samples are to be Examined by Arbitrators**

- (a) In respect of disputes arising out of the "Rye Terms" clause not later than the 10th consecutive day after the date of completion of final discharge. (See Rule6).
- (b) In other cases where samples are to be examined by the arbitrators, not later than the 21<sup>st</sup> consecutive day after completion of loading or of delivery or of discharge or of unstuffing of the container, as the case may be.

#### **2.2 Other Disputes**

In respect of all other disputes relating to the sale of goods: -

- (a) arising out of CIF, CIP, C & F, C&F and similar shipment contract terms, not later than one year after (i) the expiry of the contract period of shipment, including extension if any, or (ii) the date of completion of final discharge of the ship at port of destination, whichever period shall last expire,
- (b) arising out of FOB terms, not later than one year after (i) the date of the last bill of lading or (ii) the expiry of the contract period of delivery, including extension if any, whichever period shall first expire,
- (c) on any other terms, not later than one year after the last day of the contractual delivery, collection or arrival period, as the case may be

- 2.3** No award by the tribunal shall be questioned or set aside on appeal or otherwise on the ground that the claim was not made within the time limits stipulated in this Rule if the respondent to the claim did not raise the matter in their submissions, so as to enable the tribunal to consider whether or not to exercise the discretion vested in it by Rule 23.

### **3. APPOINTMENT OF THE TRIBUNAL**

The dispute shall be heard and determined by a tribunal of three arbitrators (appointed in accordance with Rule 3.2) or, if both parties agree, by a sole arbitrator (appointed in accordance with clause 3.1). This Rule is without prejudice to Rule 6, which governs the appointment of the tribunal in relation to disputes arising out of the Rye Terms clause, and Rule 5.3, which governs the appointment of a tribunal for examination of samples.

#### **3.1 Procedure for the Appointment of a Sole Arbitrator**

- (a) If he requires the appointment of a sole arbitrator the claimant shall, before expiry of the time limit for claiming arbitration, serve a notice on the respondent seeking his agreement to the appointment of a sole arbitrator by Gafta.
- (b) Not later than the 9th consecutive day after service of the notice referred to in (a) above, the respondent shall either; (i) serve a notice on the claimant stating that he agrees to the appointment of a sole arbitrator by Gafta, or (ii) appoint an arbitrator to a tribunal of three arbitrators and serve on the claimant a notice of the arbitrator so appointed, in which case Rule 3.2(c) shall apply.
- (c) Where the parties have agreed to the appointment of a sole arbitrator, or where the respondent has not responded to the claimant's notice under 3.1(a) above, or where the respondent has not agreed to a sole arbitrator but has not appointed an arbitrator, Gafta shall appoint an arbitrator on receipt of the first statements and evidence submitted in accordance with Rule 4, or, where interlocutory or interim decisions are required of the tribunal, upon the application of either party.

#### **3.2 Procedures for the Appointment of a Tribunal of Three Arbitrators**

- (a) The claimant shall before the expiry of the time limit for claiming arbitration appoint an arbitrator and serve a notice on the respondent of the name of the arbitrator so appointed, or apply to Gafta for the appointment of an arbitrator on its behalf and serve a copy of the application on the respondent.
- (b) The respondent shall, not later than the 9th consecutive day after service of the notice of the name of the claimant's arbitrator, appoint a second arbitrator and serve a notice on the claimant of the name of the arbitrator so appointed.
- (c) If the respondent does not agree to the appointment of a sole arbitrator and has instead appointed an arbitrator and given written notice thereof pursuant to Rule 3.1 (b), the claimant shall not later than the 9th consecutive day after service of such notice of appointment, appoint a second arbitrator and serve a notice on the respondent of the name of the arbitrator so appointed.
- (d) Where two arbitrators have been appointed, Gafta shall appoint a third arbitrator on receipt of the first statements and evidence submitted in accordance with Rule 4, or, where interlocutory or interim decisions are required of a tribunal, upon the application of either party. The third arbitrator shall be the chairman of the tribunal so formed and his name shall be notified to the parties by Gafta.

#### **3.3 Procedures for the Appointments of Arbitrators by Gafta.**

If either party fails to appoint an arbitrator or to give notice thereof within the above time limits, the

other party may apply to Gafta for the appointment of an arbitrator. Notice of such application must be served on the party who has failed to appoint.

Where the claimant has already sought the respondent's agreement to the appointment of a sole arbitrator pursuant to Rule 3.1, then Gafta will on receipt of the first statements and evidence submitted in accordance with Rule 4, or, where interlocutory or interim decisions are required of the tribunal, upon the application of either party appoint a sole arbitrator. Where either party has already appointed an arbitrator, pursuant to Rule 3.1(b) or Rule 3.2, then Gafta will appoint the second arbitrator of the tribunal.

**3.4 Applications to Gafta for the appointment of an arbitrator shall be accompanied by: -**

- (a) prima facie evidence that the parties have entered into a contract subject to these Rules,
- (b) copies of the notices (i) claiming arbitration and (ii) stating that an application will be made to Gafta for the appointment of an arbitrator,
- (c) the appropriate fee ruling at the date of application,

**3.5 Upon applications being made to Gafta under Rule 3 for the appointment(s) of an arbitrator(s), Gafta will make the appointment(s) and will give notice of the name(s) of the arbitrator(s) appointed to the parties.**

**3.6 Any party making an application to Gafta for the appointment of an arbitrator, may be required by Gafta to pay a deposit of such sum as it may require on account of any fees and expenses thereafter arising.**

**3.7 An arbitrator appointed under these Rules shall be a Gafta Qualified Arbitrator and shall not be interested in the transaction nor directly interested as a member of a company or firm named as a party to the arbitration, nor financially retained by any such company or firm, nor a member of nor financially retained by any company or firm financially associated with any party to the arbitration.**

**3.8 An appointment of an arbitrator shall be valid and effective for all purposes provided that he has signified his acceptance of the appointment to the party appointing him, or to Gafta, as the case may be, at any time prior to the discharge of any arbitral function.**

- 3.9**
- (a) If an arbitrator dies, refuses to act, resigns, or becomes incapable of acting, and/or refuses to stand down in circumstances where, in Gafta's reasonable opinion, it would be appropriate for him to do so, or if he fails to proceed with the arbitration, or is found to be ineligible, or his authority is revoked by the Gafta pursuant to the Gafta Rules and Regulations and Code of Conduct for Qualified Arbitrators, the party, or Gafta as the case maybe, who originally appointed that arbitrator shall forthwith appoint a substitute and serve notice thereof on the other party.
  - (b) If a party fails, contrary to (a) above, to appoint a substitute arbitrator and to give notice thereof within 5 consecutive days of learning of the arbitrator's death, refusal to act, resignation, incapacity, failure to proceed, finding of ineligibility or revocation of authority, as the case may be, Gafta shall, upon the application of either party, have the power to appoint a substitute arbitrator.

**4. ARBITRATION PROCEDURE**

**4.1 The claimant shall draw up clear and full submissions of his case, which, together with a copy of the contract and any supporting documents shall be served as set out in Rule 4.4. The claimant shall deposit with Gafta such sum as Gafta considers appropriate on account of the costs, fees and expenses of the arbitration. If the deposit is not received by Gafta by 12 noon on the 60th consecutive day of the date on which it was called for, the application shall be deemed to be waived and barred. Time limits as per Rule 2 to apply.**

- 4.2** The respondent shall, on receipt of the claimant's case and documents, draw up a clear and full defence submissions (and counterclaim, if any) which, together with any supporting documents, shall be served as set out in Rule 4.4.
- 4.3** The claimant may submit further written comments and/or documents in reply, such to be served as set out in Rule 4.4.
- 4.4** All submissions and evidence shall be served by sending them to the other party, with copies to Gafta. In the case of a sole arbitrator 2 sets, or in the case of a tribunal of three arbitrators, 4 sets of statements and evidence shall be delivered to Gafta. All submissions and evidence are to be in English or with English translations.
- 4.5** The tribunal may vary or depart from the above procedure in order to give each party a reasonable opportunity of putting his case and dealing with that of his opponent, and shall adopt procedures suitable to the circumstances of the particular case, avoiding unnecessary delay or expense, so as to provide a fair means for the resolution of the matters falling to be determined.
- 4.6** Upon receipt of the deposit as per Rule 4:1 the timetable for the proceedings, including any steps to be taken pursuant to Rule 4 and/or determined by the tribunal will be advised to the parties by Gafta. It shall be the duty of the tribunal to ensure the prompt progress of the arbitration, including the making of orders where appropriate. Any delay in the proceedings may be notified to Gafta.
- 4.7** Nothing in this Rule shall prevent the respondent from delivering his statement and documentary evidence before receiving documents/statements from the claimant.
- 4.8** The tribunal may grant an oral hearing if requested by a party to do so, on such terms and conditions as it deems appropriate, or decide whether in the circumstances of the case it is necessary to convene one. In the event that there is to be an oral hearing, the date, time and place will be arranged by Gafta. The form in which the parties can join an oral hearing is at the tribunal's discretion. In exceptional circumstances where, as a consequence, the majority of the tribunal are unable to travel to the designated place of hearing, the tribunal may, at its absolute discretion and where it believes it appropriate to do so, convene a virtual hearing using such electronic media as it deems fit. The decision of the tribunal shall be final and binding on the parties. The parties may be represented by one of their employees, or by a Gafta Qualified Arbitrator or other representative, but they may not be represented by a solicitor or barrister, or other legally qualified advocate, wholly or principally engaged in private practice, unless legal representation is expressly agreed. The tribunal may call upon either party to deposit with Gafta such sum or sums as the tribunal considers appropriate on account of fees, costs and expenses.
- 4.9** Where no oral hearing is to take place members of a three arbitrator tribunal need not meet in person but may communicate with each other by post, telephone, fax, e-mail or other appropriate means in order to discuss the parties' submissions and to arrive at a decision of the dispute, always without prejudice to the requirement in Rule 9.1 below that the chairman shall sign the award.
- 4.10 Lapse of Claim**  
If neither party submits any documentary evidence or submissions as set out in this Rule or as ordered by the tribunal, within 1 year from the date of the notice claiming arbitration, then, the claimant's claim shall be deemed to have lapsed on the expiry of the said period of 1 year unless before that date the claim is renewed:
- (a) by a notice served by either party on the other, such notice to be served during the 30 consecutive days prior to the expiry date, or
  - (b) by the service of documentary evidence or submissions by either party,
- in which case the claim and counterclaim are each renewed for a further year.



The claim may be thus renewed for successive periods of 1 year, but not to exceed more than 6 years from the date of the first notice served in accordance with Rule 2. Wherever a claim is renewed any counterclaim is also deemed to be renewed.

- 4.11** If the arbitration is abandoned, suspended or concluded, by agreement or otherwise, before the final award is made, the parties shall be jointly and severally liable to pay to Gafta the tribunal's and Gafta's costs, fees and expenses.

## **5. SAMPLES**

- 5.1** If either party wish to submit samples for examination by the tribunal, those samples shall be drawn, sealed and despatched to Gafta in accordance with the provisions of the Gafta Sampling Rules No. 124, no later than 21 consecutive days after the date of completion of discharge or of the unstuffing of the container or the date the sample was taken, as the case may be, and shall be held at the disposal of the tribunal.
- 5.2** As soon as possible after receipt (and if necessary prior to the completion of the exchange of submissions and documents pursuant to Rule 4 and/or the order of the tribunal), the samples shall be examined by the tribunal.
- 5.3** Upon the joint application of both parties and at their expense, Gafta may arrange for the examination of the samples to take place at the relevant place agreed by the parties, by the tribunal to be appointed by Gafta. This provision does not over-ride the parties' obligations to take, seal and despatch samples where required by the Gafta Sampling Rules No. 124. The tribunal so appointed shall determine all matters in dispute between the parties.
- 5.4** All samples sent to Gafta for arbitration, testing and/or other purposes shall become and be the absolute property of Gafta.

## **6. ARBITRATION PROCEDURE FOR CLAIMS ARISING OUT OF THE "RYETERMS" CLAUSE**

- 6.1** When the claimant has served on the respondent notice of its intention to refer the dispute to arbitration in accordance with Rule 2.1(a) he shall send a copy of the notice to Gafta, together with sufficient information to identify the samples relating to the claim.
- 6.2** Notwithstanding anything to the contrary in these Rules, upon receipt of the notice as above, Gafta shall appoint a tribunal of three arbitrators.
- 6.3** Any documentary submissions or evidence to be submitted by the parties shall be provided in accordance with Rule 4.
- 6.4** An award made pursuant to this Rule shall be final and binding and no appeal shall lie to a board of appeal.

## **7. STRING ARBITRATIONS – CONSOLIDATED ARBITRATIONS AND CONCURRENT HEARINGS**

- 7.1** If a contract forms part of a string of contracts which contain materially identical terms (albeit that the price may vary under each contract), the tribunal may hold a single arbitration to determine the dispute between the first seller and the last buyer in the string as though they were parties who had contracted with each other, provided all the parties in the string of contracts agree to it in writing.

Any award made in such proceedings shall, subject only to any right of appeal pursuant to Rule 10, be binding on all the parties in the string and may be enforced by an intermediate party against his immediate contracting party as though a separate award had been made pursuant to each contract.

- 7.2** In the absence of an agreement from all the parties involved, the tribunal has the right to conduct arbitral proceedings concurrently with other arbitral proceedings, and, in particular, concurrent or consolidated hearings may be held, but separate awards shall be made pursuant to each contract.

## **8. ISSUES OF SUBSTANTIVE JURISDICTION, PROVISIONAL ORDERS AND AWARDS ON DIFFERENT ASPECTS**

### **8.1 Issues of Substantive Jurisdiction**

- (a) The tribunal may rule on its own jurisdiction, that is, as to whether there is a valid arbitration agreement, whether the tribunal is properly constituted and what matters have been submitted to arbitration in accordance with the arbitration agreement.
- (b) In the event that the tribunal determines it has no jurisdiction, Gafta will notify the parties of the tribunal's decision. Such decision shall be final and binding upon the parties subject to any right of appeal to a board of appeal pursuant to Rule 10. Gafta will invoice the claimant for any costs, fees and expenses incurred. In the event that the tribunal determines that it has jurisdiction, no appeal shall lie to a board of appeal.
- (c) If the board of appeal upholds the tribunal's determination that it has no jurisdiction, the board of appeal shall order accordingly and Gafta shall notify the parties and the tribunal and will invoice the appellant for any costs, fees and expenses incurred.
- (d) If the board of appeal reverses the tribunal's determination that it has no jurisdiction, the board of appeal shall order accordingly, and Gafta shall notify the parties and the tribunal, and shall order that the dispute be referred to arbitration afresh, whereupon:-
  - (i) The dispute shall be deemed to be one arising out of a contract embodying these Rules.
  - (ii) The tribunal formerly appointed shall thereupon cease to act and shall not be re-appointed when the dispute is referred as aforesaid.
  - (iii) The provisions of Rule 3 shall apply, the time limits for appointment running from the date of the board of appeal's order.
  - (iv) The board of appeal may in its absolute discretion extend the time limits in these Rules, and no objection that time has expired shall be taken if the requirements of Rules were previously complied with.

### **8.2 Provisional Orders**

Where the tribunal decides at any time to order on a provisional basis any relief which it would have power to grant in a final award, no appeal shall lie to a board of appeal until the tribunal has issued a final award determining the issues between the parties.

### **8.3 Awards on Different Aspects**

Where the tribunal decides during the course of an arbitration to make an award dealing finally with one or more aspects of the dispute, but which leaves to be decided by the tribunal other aspect(s) of the dispute, it may make an award which shall be final and binding as to the aspect(s) with which it deals, subject to any right of appeal pursuant to Rule 10.

## **9. AWARDS OF ARBITRATION**

- 9.1** All awards shall be in writing and shall be signed by the sole arbitrator or, in the case of an award made by a three-man tribunal, by the chairman. The tribunal shall have the power to assess and award the costs of and connected with the reference and also the fees and/or expenses incurred by the tribunal. The tribunal will assess and award costs at the conclusion of the arbitration. The fees and/or expenses of Gafta shall be those for the time being in force as prescribed by the Council of Gafta and any non-member fee shall be for the account of the non-member.

- 9.2** The tribunal shall, on the application of either party, made before the arbitration award is made, have the power to extend the time for appealing in any case in which it considers it just or necessary so to do. Any such extension must be stated in the award.
- 9.3** The tribunal shall submit the award to Gafta. Upon receipt of the signed award Gafta shall give notice to the parties named in the award that the award is at their disposal upon payment of the fees and expenses incurred by the tribunal and Gafta. Gafta shall first call upon the claimant to pay any outstanding balance. If payment is not received by Gafta within 21 days from such notice, Gafta shall call upon the respondent to take up the award. Upon receipt of the fees and/or expenses, Gafta shall date and issue the award to the parties, which date shall for the purpose of the Arbitration Act 1996 and these Rules be deemed to be the date on which the award was made.
- 9.4** Subject to any right of appeal pursuant to Rule 10 awards of arbitration shall be conclusive and binding on the parties with respect both to the matters in dispute and as to costs.
- 9.5** No award shall be questioned or invalidated on the ground that an arbitrator was not qualified to act unless such objection was made at the outset of the arbitration.

## **10. RIGHT OF APPEAL**

- 10.1** Save as provided in Rules 6.4, 8.1(b), 8.2, 19 and 21, either party may appeal against an award to a board of appeal provided that the following conditions are complied with: -
- (a) Not later than 12 noon on the 30th consecutive day after the date on which the award was made the appellant shall: -
    - (i) ensure that a written notice of appeal is received by Gafta,
    - (ii) serve a notice of his intention to appeal on the other party and ensure receipt of a copy by Gafta, and
    - (iii) ensure Gafta have received cleared funds of the appeal deposit stated on the award of arbitration on account of the costs, fees and expenses of the appeal,otherwise the right of appeal shall be deemed to be waived and barred.
  - (b) The fees and expenses of the arbitration award incurred by the tribunal and/or Gafta shall be paid to Gafta before the appeal is heard.
  - (c) The appellant shall pay such further sum or sums on account of fees, costs and expenses as may be called for by Gafta or the board of appeal at any time after the lodging of the appeal (as defined in (a) and (b) above). In the event of nonpayment the respondent may be directed by the board of appeal to pay such further sum or sums. If payment is not received from either party prior to the hearing or subsequent hearings, the board of appeal may decide to stay the proceedings until such payment is made or if the further sums are not received within 30 days of the date on which they were called for, the appeal may be deemed lapsed. The fees charged by the board of appeal shall be in accordance with the scale of fees laid down by the Council from time to time.
- 10.2** If appeals are lodged by both parties to the award Gafta shall have the power to consolidate such appeals for hearing by the same board of appeal.

## **11. BOARDS OF APPEAL**

- 11.1** Boards of appeal shall be elected and constituted in accordance with the Gafta Rules and Regulations. Where the first tier arbitration award was made by a sole arbitrator the board of appeal will comprise

of three members. Where the first tier award was made by a tribunal of three arbitrators, then the board of appeal shall comprise of five members. Gafta will notify the parties of the names of the members of the board of appeal. The board of appeal will be provided with a copy of the first tier Award.

- 11.2** If a member of the board of appeal dies, refuses to act, resigns, or becomes incapable of acting, and/or refuses to stand down in circumstances where, in Gafta's reasonable opinion, it would be appropriate for him to do so, or if he fails to proceed with the appeal, or is found to be ineligible, or his authority is revoked by Gafta pursuant to the Gafta Rules and Regulations Gafta will appoint a substitute.

## **12. APPEAL PROCEDURE.**

- 12.1** The board of appeal may grant an oral hearing at the request of either party, on such terms and conditions as it deems appropriate, or decide whether in the circumstances of the case it is necessary to convene one. In the event that there is to be an oral hearing, the date, time and place will be arranged by Gafta having due regard to any agreement reached by the parties, the time table below or any other timetable determined by a board of appeal. The form in which parties may join an oral hearing is at the board of appeal's discretion. In exceptional circumstances where, as a consequence, the majority of the board members are unable to travel to the designated place of hearing, the board may, at its absolute discretion and where it believes it appropriate to do so, convene a virtual hearing using such electronic media as it deems fit. The decision of the board shall be final and binding on the parties.
- 12.2** In the event of an oral hearing the parties may be represented by one of their employees, or by a Gafta Qualified Arbitrator (who has not previously acted in the case) or other representative, but they may not be represented by a solicitor or barrister, or other legally qualified advocate, wholly or principally engaged in private practice, unless legal representation is expressly agreed. In accordance with the time table notified to the parties by Gafta concise statements of case (skeleton arguments) shall be exchanged and a common bundle of documents (documentary evidence) agreed by the parties as follows: -
- (a) The appellant shall serve his concise statement of case (skeleton arguments) on the respondent with a copy to Gafta.
  - (b) The respondent shall serve his concise statement of case (skeleton arguments) on the appellant with a copy to Gafta.
  - (c) The appellant shall send to Gafta 5 sets of documentary evidence, in a common bundle, agreed by the respondents. (Either party may submit documentary evidence not agreed for inclusion in the common bundle of documents).
- 12.3** In the event that there is no oral hearing the parties shall serve their full submissions and documentary evidence in accordance with the time table notified to the parties by Gafta, as follows: -
- (a) The appellant shall serve his submissions together with supporting documents
  - (b) The respondent shall on receipt of the appellant's submissions and any documents, serve defence submissions, together with supporting documents.
  - (c) The appellant then has the right on receipt of the respondent's defence submissions and documents, to issue a statement in reply.

Submissions and documentary evidence (which may include new evidence not before the arbitrators) shall be served by sending them to the other party with copies to Gafta. Where the appeal is against the award of a sole arbitrator 4 copies, or where the appeal is against the award of a tribunal of three arbitrators 6 copies, shall be sent to Gafta.

Where no oral hearing of the appeal is to take place, members of a board of appeal need not meet in person but may communicate with each other by telephone, letter, fax and e-mail or any other

electronic means, in order to discuss the parties' submissions and to arrive at a decision on the appeal.

- 12.4** The board of appeal has the right to decide to conduct arbitral proceedings concurrently with other arbitral proceedings, and, in particular, concurrent or consolidated hearings may be held, but separate awards shall be made unless all the parties involved agree otherwise in writing.
- 12.5** An appeal involves a new hearing of the dispute and the board of appeal may confirm, vary, amend or set-aside the award of the tribunal. In particular (but not by way of restriction), the board of appeal may;
- (a) vary an award by increasing or reducing the liability of either party,
  - (b) correct any errors in the award or otherwise alter or amend it,
  - (c) award the payment of interest,
  - (d) award the payment of costs, fees and expenses of and incidental to the hearing of the arbitration and the appeal. Such costs, fees and expenses will normally follow the event.
- 12.6** An award shall be confirmed unless the board of appeal decides by a majority to vary, amend or set it aside.
- 12.7** The award of the board of appeal, whether confirming, varying, amending or setting aside the original award of arbitration, shall be signed by the chairman of the board of appeal, and, when so signed, shall be deemed to be the award of the board of appeal, and shall be final, conclusive and binding. Rule 9.3 shall apply to awards of the board of appeal.
- 12.8** No award of a board of appeal or decision by a board of appeal on any issue or aspect shall be questioned or invalidated on the ground that any of its members was not qualified to act unless objection is made within a reasonable period of the notification of the members of the board of appeal.

### **13. WITHDRAWALS OF APPEALS**

- 13.1** The appellant shall have the right, at any time before the board of appeal makes an award, to withdraw his appeal by giving notice of such withdrawal to Gafta, and in such case Gafta shall forthwith notify all parties to the arbitration that the appeal has been withdrawn. If notice of withdrawal is received by Gafta within 10 consecutive days of the date on which the appeal was lodged in accordance with Rule 10.1, two thirds of the deposit shall be returned. Thereafter, if notice of withdrawal is received before the final award is made, the parties shall be jointly and severally liable to pay to Gafta the board of appeal's and Gafta's costs, fees and expenses.
- 13.2** In the event of withdrawal the respondent shall continue to have the right of appeal against the award to a board of appeal in accordance with the provisions of Rule 10, save that the time limit laid down in Rule 10.1 shall be 12 noon on the 30th consecutive day after the date of service of notice by Gafta to that party of the aforesaid withdrawal.

### **14. APPEALS ON STRING CONTRACTS – Quality and/or Condition**

- 14.1** Where a "string" award is made pursuant to Rule 7.1, then, unless it is an award determining a dispute arising out of the "Rye Terms" clause, each party in the string shall be entitled to appeal against that award to a board of appeal, provided that each of the following provisions, in addition to the provisions of Rule 10, are complied with:-
- (a) If the appellant is an intermediate party he shall state in his notice of appeal whether he is appealing as a buyer or as seller.
  - (b) If the appellant is the first seller or the last buyer he shall, within the time limits set out in Rule



10.1 (a) (ii) serve written notice of his intention to appeal on the party in immediate contractual relationship with him.

- (c) If the appellant is an intermediate party and is appealing as buyer or seller he shall, within the time limits set out in Rule 10.1 (a) (ii) serve notice of his intention to appeal on both the respondent to the appeal and also his own immediate seller or buyer.
- (d) The recipient of a notice served pursuant to the above provisions may, if it wishes to commence appeal proceedings against its own immediate contracting party, pass on a like notice upon the next party in the string. Such notice shall be passed on with due despatch, in which case the time limit in Rule 10 shall be deemed to have been complied with.

**14.2** All appeals to which this Rule applies and to all awards made pursuant to this Rule shall be binding on every appellant and respondent. Non-compliance with any provisions of Rule 14.1(d) shall in no way limit or affect the jurisdiction of the board of appeal.

## **15. APPEAL AWARDS**

**15.1** The board of appeal shall submit the award to Gafta. Upon receipt of the signed award Gafta shall give notice to the parties named in the award that the award is at their disposal upon payment of the fees and expenses incurred by the board of appeal and Gafta. Gafta shall first call upon the appellant to pay any outstanding balance. If payment is not received by Gafta within 21 days from such notice, Gafta shall call upon the respondent to take up the award. Upon receipt of the fees, costs and expenses, Gafta shall then date and issue the award to the parties, which date shall, for the purposes of the Arbitration Act 1996, be deemed to be the date upon which the award is made.

**15.2** Appeal awards may be made available to the first tier tribunal.

## **16. CANCELLATION COSTS**

In the event of either party cancelling or postponing a hearing, the tribunal or board of appeal (as the case may be), shall be entitled, at their discretion, to charge a cancellation fee and expenses. The fee shall be based on the Gafta notional daily sitting rate, as may vary from time to time, multiplied by the number of days which, but for the cancellation or postponement of a hearing, have been vacated.

The fee shall be calculated on a sliding scale, as follows:

If the cancellation or postponement is between 6-2 weeks before the date of the hearing, 50% of the Gafta notional daily sitting rate.

If the cancellation or postponement is within 2 weeks of the date of the hearing, including during the hearing itself, 75% of the Gafta notional daily sitting rate

## **17. REPRESENTATION COSTS**

**17.1** The parties may expressly agree in writing that they may engage legal representatives (i.e. a solicitor and a barrister, or other legally qualified advocate, or advisor, wholly or principally engaged in private practice), to represent them in the arbitration and/or in any appeal proceedings and to appear on their behalf at any oral hearings. The tribunal, and/or the board of appeal, shall determine the recoverable costs of engaging legal representatives.

**17.2** Where there is no such agreement between the parties they are nevertheless free to engage legal representatives to represent them in the written proceedings but not to appear on their behalf at oral hearings. The costs of engaging legal representatives in such circumstances shall not be recoverable even if claimed.

**17.3** In any event, an instructed representative is obliged to provide proof of identity of their client's company and evidence demonstrating they are instructed to act by the party in the arbitration proceedings.

**17.4** Unless expressly agreed otherwise, in writing, each party shall bear all their own costs including their own legal and representation costs.

**18. TRIBUNAL'S OR BOARD OF APPEAL'S OWN EVIDENCE**

If at any time prior to the close of the proceedings the tribunal or the board of appeal deem it appropriate, they may take steps to ascertain the facts and the law on their own initiative, provided that they give both parties reasonable opportunity to comment on and/or provide evidence in response.

**19. FEES AND EXPENSES**

**19.1** Each party engaging in an arbitration or an appeal pursuant to these Rules, whether or not a Member of Gafta, is deemed thereby to agree to abide by these Rules and to agree with Gafta to be liable to Gafta (jointly and severally with the other parties to the arbitration or appeal) for all fees and expenses incurred in connection with the arbitration or appeal or any remissions, which said fees and expenses shall, upon notification by Gafta be and become a debt due to Gafta.

**20. CURRENCY REGULATIONS**

If an appellant is precluded by currency regulations from paying any money due to be paid by him, and notifies Gafta in writing (a) in the case of inability to pay the appeal fee when giving notice of appeal, and (b) in the case of inability to pay any further sum directed to be paid, within 9 consecutive days of the money being demanded, accompanied in every case by evidence from a bank that he has already made application for the transfer of the required sum, he shall be entitled to an extension of up to 35 consecutive days from the date when the said payment became due in which to pay such sum.

**21. NOTICES**

**21.1 Service on parties**

All notices to be served on the parties pursuant to these Rules shall be in legible form by E-mail, or by other mutually recognised electronic method of rapid communication. For the purposes of time limits, the date of despatch shall, unless otherwise stated, be deemed to be the date of service.

Service on the brokers or agents named in the contract shall be deemed proper service under these Rules. So far as concerns such notices, this Rule over-rides any other provisions of the contract.

**21.2 Service on Tribunals and Boards of Appeal**

Unless the tribunal or board of appeal otherwise directs, all notices, proceedings and documents to be served on arbitrators and members of a board of appeal pursuant to these Rules shall be served in legible form by E-mail, or by other mutually recognised electronic method of rapid communication on the Secretary of Gafta at the offices of Gafta. For the purposes of any time limits receipt of such notices by Gafta shall be deemed to be the date of service.

**21.3 Computation of Time**

Where these Rules require service not later than a specified number of consecutive days after a specified date or occurrence, that specified date or occurrence shall not count as one of the consecutive days.

**22. RETENTION OF DOCUMENTS**

**22.1** All case documents, except submissions, will be kept by Gafta for a period of 6 months from the date the award is issued unless a longer period is requested by either party in writing.

**23. NON-COMPLIANCE WITH TIME LIMITS AND RULES**

The following shall apply if any time limit(s) imposed by these Rules is (are) not complied with:-

(a) When such matters are raised at the arbitration as a defence to the arbitration claim, the tribunal in its discretion may admit a claim if satisfied that the circumstances were outside the reasonable contemplation of the parties when they entered into the contract and that it would

be just to extend the time, or when the conduct of one party makes it unjust to hold the other party to the strict terms of the time limit in question. Otherwise the tribunal may determine that the claim is waived and barred and refuse to admit it. If the provision of 4.1 has not been complied with, then the case shall be deemed to be waived and absolutely barred subject to the discretion of the Tribunal. There shall be no appeal to the board of appeal against the decision of the tribunal to admit a claim. If a tribunal decides not to admit the claim, then the claimant shall have the right to appeal pursuant to Rule 10, and the board of appeal shall have the power in its absolute discretion to overturn that decision and to admit the claim;

- (b) On appeal if any of the provisions of Rules 10.1(a), 10.1(b), 12.7 or 19 have not been complied with, then the appeal shall be deemed to be waived and absolutely barred, subject to the discretion of the board of appeal when raised as a defence by the appellant. The board of appeal in its absolute discretion may dispense with the necessity for compliance. In which event the board of appeal may proceed to hear and determine the appeal as if each and all of those Rules had been complied with. Any decision made pursuant to this Rule shall be final, conclusive and binding.

## **24. DEFAULTERS**

- 24.1** In the event of any party to an arbitration or an appeal held under these Rules neglecting or refusing to carry out or abide by a final award of the tribunal or board of appeal made under these Rules, the Council of Gafta may post on the Gafta Notice Board, Web-site, and/or circulate amongst Members in any way thought fit notification to that effect. The parties to any such arbitration or appeal shall be deemed to have consented to the Council taking such action as aforesaid.
- 24.2** In the event that parties do not pay the costs, fees or expenses of the arbitration or appeal when called upon to do so by Gafta in accordance with these Rules, the Council may post on the Gafta Notice Board, Web-site, and/or circulate amongst Members in any way thought fit notification to that effect. The parties to any such arbitration or appeal shall be deemed to have consented to the Council taking such action as aforesaid.

*References to the masculine include references to the feminine and also to companies, corporations or other legal persons.*

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# U.S. Standards

April 1998

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## **HISTORICAL COMPILATION OF CHANGES IN THE GRAIN STANDARDS OF THE UNITED STATES**

The United States Grain Standards Act (Act) was passed by Congress on August 11, 1916. The first standards established under the Act were for corn and became effective December 1, 1916. Since then, standards have been developed for barley, canola, flaxseed, mixed grain, oats, rye, sorghum, soybeans, sunflower seed, triticale, and wheat.

The standards for the various grains have been revised or amended from time to time. This publication which contains a compilation of these revisions and amendments and a cross-reference guide, supersedes "Historical Compilation of Changes in the Grain Standards of the United States" dated September 1996.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternate means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint, write to the USDA, Office of Civil Rights, Room 326-W, 1400 Independence Avenue, SW, Washington, DC 20250-9410, or call (202) 720-5964 (voice and TDD). USDA is an equal employment opportunity employer.

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## **SUBPART A - GENERAL PROVISIONS**

Established effective June 30, 1987 (52 FR 24418, 6/30/87)

Established Subpart A - General Provisions for terms common to all grains and revised the rounding procedures as stated in the section on percentages to more generally accepted mathematical procedures. Certain sections are removed from individual grain standards and are included in Subpart A, such as test weight per bushel, moisture, and stones. The common wording for Basis of Determination and rounding procedures are removed from each standard. Also, the wording for Grade Designations and Special Grade Designations are removed from individual standards and rewritten in general terms for inclusion into Subpart A.

Revised effective May 1, 1988 (52 FR 24441, 6/30/87)

Redefined the infested designation as it applies to the representative sample, lot as a whole (stationary), and sample as a whole (continuous loading/ unloading of shiplots and bargelots).

Revised effective September 1, 1994 (57 FR 3274, 1/29/92)

Revised the method of recording the percentage of splits in soybeans from in whole percent with fractions of a percent being disregarded to the nearest tenth percent.  
Revised effective June 1, 1997 (61 FR 18486, 4/26/96 and 61 FR 24669, 5/16/96)  
Revised the method of recording the percentage of dockage in barley from whole percent with fractions of a percent being disregarded to whole and half percent with a fraction less than one-half percent disregarded.

Revised effective June 1, 1999 (63 FR 20054, 4/23/98)

Revised the method of recording the percentage of dockage in rye from whole percent with fractions of a percent being disregarded to the nearest tenth percent.

Revised effective September 1, 2007 (71 FR 52403, 9/6/06)

Revised the method of recording Test Weight (TW) for soybeans from whole and half pounds with a fraction of a half pound disregarded to the nearest tenth pound. Also, clarified that TW in canola is only determined and reported upon the request of an applicant.

## SUBPART B. BARLEY

Established effective August 24, 1926

Amended effective September 15, 1927

1. Changed requirements for sound barley in grades Nos. 2 and 3 in the class Barley from 88 to 86 percent in both grades.
2. Changed percentage of oats and wild oats in grades Nos. 2 and 3 in the class Barley from 8 to 10 percent in both grades.
3. Changed the moisture content in grades Nos. 2, 3, and 4, and No. 1 Feed in the class Barley from 14.5 to 15.5 percent for each grade.

Amended effective July 21, 1933

1. Sound barley definition changed to exclude barley which was damaged or materially discolored by blight and/or mold.
2. Sample grade definition changed to include barley with more than 5 percent of barley damaged or materially discolored by blight or mold.
3. Established a grade Blighted barley for barley with more than 2 percent but not more than 5 percent of kernels damaged or materially discolored by blight and/or mold.

Revised effective July 2, 1934

1. Class I Barley was divided into two subclasses: Malting Barley and Barley.
2. Eliminated special No. 2 and No. 1 Feed, and adopted five numerical grades and Sample grade.
3. Grade requirements for class Black Barley were made the same as for the class Barley.
4. Eliminated the class Two-rowed Barley and established special grade for Two-rowed barley.
5. Eliminated grade factor general appearance and required that badly stained or materially weathered barley grade not higher than No. 4.
6. Adopted a dockage system for the class Barley.
7. Raised the percentage of sound barley in grades No. 2 and No. 3 from 86 and 86 percent to 93 and 90 percent for the class Barley.

8. Changed the basis of grade determination for all factors except dockage, temperature, odor, garlic, and insects in all classes of Barley from the grain as a whole to the grain when free from dockage.
9. Redesignated the grades Bleached barley, Garlicky barley, Weevily barley, Smutty barley, and Blighted barley as special grades and established special grades for test weight of Western barley, Bright Western barley, Stained Western barley, Two-rowed barley, Tough barley, and Ergoty barley.
10. Eliminated test weight as a numerical grading factor for Western Barley.
11. Eliminated skinned kernels as a grading factor except for Malting Barley and increased the limits for broken kernels in all classes except Malting Barley.
12. Eliminated smutty odor as a grading factor in the special grade Smutty.

Amended effective July 1, 1935

Changed the basis method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.

Amended effective July 1, 1937

1. Eliminated the determination of dockage on the basis of specific classes and adopted one method for determining dockage for all classes of barley.
2. Required that heat-damaged and mellow kernels be determined on the basis of the pearled dockage-free grain.
3. Added a definition for damaged barley.

Amended effective July 1, 1950

Revised the special grade for Two-rowed barley and provided special grades for Choice Malting Two-rowed Western Barley and Malting Two-rowed Western Barley.

Revised effective August 2, 1954

Excluded barley injured by heat, mold, and barley of the special grade Weevily from the definition for Choice Malting Two-rowed and Malting Two-rowed Western Barley, and provided that No. 1 Malting Two-rowed Western Barley be of somewhat higher quality than the No. 2 and No. 3.

Revised effective July 1, 1956

1. Provided for a subclass Blue Malting Barley.
2. Provided numerical grades and grade requirements for the subclasses Malting Barley and Blue Malting Barley.
3. Eliminated the class Black Barley and provided that black barley be graded as Mixed Barley.
4. Provided maximum limits of thin barley in each of the numerical grades for all subclasses of the class Barley.
5. Changed the minimum limits of sound barley from 95 and 93 percent in grades No. 1 and No. 2 to 97 and 94 percent.
6. Provided maximum limits of damaged kernels and heat-damaged kernels in each of the numerical grades for the subclass Barley of the class Barley and of damaged kernels in each of the numerical grades for the subclasses Malting Barley and Blue Malting Barley in the class Barley.

Revised effective July 1, 1960

1. Reduced the percentage of skinned and broken kernels in the definition for the subclass Malting Barley from 10.0 percent to 8.0 percent.
2. Reduced the maximum limits of skinned and broken kernels in grades No. 2 and No. 3 of the subclasses Malting Barley and Blue Malting Barley from 7.0 percent and 10.0 percent to 6.0 percent and 8.0 percent.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include barley which contains more than two crotalaria seeds in 1,000 grams.

Amended effective July 1, 1962

1. Provided that barley grown in Alaska be classed as Barley rather than Western Barley.
2. Changed the special grades Choice Malting Two-rowed Western Barley and Malting Two-rowed Western Barley to Choice Malting Two-rowed Barley and Malting Two-rowed Barley to permit the grading of the variety Betzes under these special grades.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the barley standards changed from “Official Grain Standards of the United States for Barley” to “United States Standards for Barley.”

Revised effective November 1, 1976 (40 FR 33428, 8/8/75)

1. Provided that barley be classed by kernel characteristics instead of area of production such as Western Barley.
2. Reduced the minimum test weight per bushel for U.S. No. 1 Choice Two-Rowed Malting Barley from 52 to 50 pounds and for U.S. No. 1, 2, and 3 Two-Rowed Malting Barley from 50 to 48 pounds.
3. Defined the term plump barley and provided a basis for reporting the amount found in malting barley.
4. Changed the special grade limit from 0.3 percent to 0.10 percent for Ergoty barley.
5. Redesignated the terms used to describe barley kernels damaged by frost, mold, or heat and established limits for such damage.

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Barley, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective June 30, 1987 (52 FR 24418, 6/30/87)

1. Removed the requirement, “semisteely in mass,” from the definition of malting barley and removed the special grades “Tough,” “Stained,” “Bleached,” and “Bright.”
2. Removed the terms “frost-damaged kernels (minor),” “mold-damaged kernels (minor),” and “heat-damaged kernels (minor)” and substitute the terms “injured-by-frost kernels,” “injured-by-mold kernels,” and “injured-by-heat kernels,” respectively, and deleted such terms, except for injured-by-heat, from the definition of damage.



3. Removed the term “black barley” as a grade-determining factor and included black barley under the definition of “other grains.”
4. Removed the requirement that barley containing smut in excessive amounts be graded Sample grade.
5. Removed the requirement for wild brome grass seeds in the definition of Sample grade.
6. Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade “weevily” to “infested” to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for “infested.”

Amended effective June 1, 1997 (61 FR 18486, 4/26/96 and 61 FR 24669, 5/16/96)

1. Modified the classification system of barley by establishing two classes: Malting barley and Barley. Revised Two-rowed Malting barley by removing the U.S. No. 1 Choice grade designation. Amended the definition for suitable malting type to include other malting varieties used by private malting and brewing companies.
2. Amended the subclass definitions for Six-rowed and Two-rowed barley by deleting the reference to Malting barley.
3. Revised the dockage certification procedure by reporting results in half and whole percent with a fraction less than one-half being disregarded.
4. Amended the definition of thins to require the use of a single sieve (5/64 x 3/4 slotted-hole) only in the class Barley.
5. Eliminated the numerical grade restriction for badly stained and materially weathered from the standards.

## **SUBPART C. CANOLA**

Established effective February 28, 1992 (57 FR 3274, 1/29/92)

Revised effective September 1, 2007 (71 FR 52403, 9/6/06)

1. Clarified reporting requirements for test weight per bushel (TW)

## **SUBPART D. CORN**

Established effective December 1, 1916

Revised effective July 15, 1918

1. Defined corn as shelled corn of the flint or dent varieties.
2. Changed the heading of the grade factor heat-damaged and mahogany kernels to heat-damaged kernels and raised the allowance for this factor in the six numerical grades from 0.0, 0.0, 0.0, 0.5, 1, and 3 percent to 0.0, 0.1, 0.3, 0.5, 1.0, and 3.0 percent.
3. Added minimum test weight per bushel of 51, 49, 47, and 44 pounds for the grades Nos. 3, 4, 5, and 6.
4. Added the terms commercially objectionable foreign odor and heating and dropped the term fire-burned in the definition for Sample grade.
5. Deleted the terms immature and badly blistered from the definition of grade No. 6.

Amended effective October 3, 1921

Changed from a 14/64-inch sieve to a 12/64-inch sieve for determining foreign material and cracked corn.

Amended effective August 15, 1924

Changed the grading of corn infested with live weevils from Sample grade to a grade Weevily corn.

Revised effective September 1, 1934

1. Reduced the number of numerical grades from six to five, redesignated the grade Weevily corn as a special grade, and established a special grade for Flint corn.
2. Total damage was liberalized from 2, 4, 6, 8, 10, and 15 percent to 3, 5, 7, 10, and 15 percent; and heat damage was liberalized from 0.0, 0.1, 0.3, 0.5, 1, and 3 percent to 0.1, 0.2, 0.5, 1.0, and 3.0 percent in the several numerical grades.

3. The definition of Sample grade was changed to include musty and sour corn which was previously included in grade No. 6.
4. Test weights for the several grades were changed from 55, 53, 51, 49, 47, and 44 to 54, 53, 51, 48, and 44.
5. The percentage of other grains was limited to 10 percent. Prior to this change, there was nothing in the corn standards about other grains, and other grains were limited by the amount of foreign material and cracked corn.
6. Moisture in grades 4 and 5 was changed from 19.5 and 21.5 percent to 20.0 and 23.0 percent.
7. Cracked corn and foreign material in grade No. 5 was changed from 6 percent to 7 percent.

Amended effective July 1, 1935

Changed the basic method for determining moisture from the Brown-Duvel to the water-oven method or any method giving similar results.

Amended effective January 20, 1937

Redefined the special grade Flint corn and added a special grade Flint and Dent corn.

Revised effective October 1, 1959

1. Changed the basic method for determining moisture from the water-oven method to the air-oven method.
2. Changed the minimum test weight per bushel from 54, 53, 51, 48, and 44 pounds to 56, 54, 52, 49, and 46 pounds for grades Nos. 1 through 5.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include corn which contains more than two crotalaria seeds in 1,000 grams.

Amended effective June 3, 1966

Interpretations regarding the term “yellow kernels of corn with a slight tinge of red” and “white kernels of corn with a slight tinge of light straw or pink color” were published as an added part of the standards.

Amended effective March 30, 1969

The corn standards were assigned new section numbers (§§ 26.151 - 26.153 to §§ 26.351 - 26.353).

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the corn standards changed from "Official Grain Standards of the United States for Corn" to "United States Standards for Corn."

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Corn, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective February 1, 1978 (43 FR 2816, 1/20/78)

1. Established a special grade Waxy corn comprising corn of any class which consists of 95 percent or more waxy corn.
2. Established a new requirement "slightly yellow" in the determination of other colors in White Waxy Corn.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective September 9, 1985 (49 FR 35340, 9/7/84)

1. Included a definition for D.L.Q. (Distinctly low quality).
2. Included in the definition of Sample grade specific limits for stones, glass, castor beans, cockleburs, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), and animal filth.
3. Deleted corn from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly low quality) and included the numerical limit for crotalaria seeds in the Sample grade definition.
4. Deleted moisture content as a grade-determining factor.

Amended effective June 30, 1987 (52 FR 24418, 6/30/87)

1. Removed Interpretations (§§ 810.904 and 810.905) with respect to the term “yellow kernels of corn with a slight tinge of red,” and with respect to the term “white kernels of corn with a slight tinge of straw or pink color,” respectively.
2. Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade “weevily” to the term “infested” to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for “infested.”

Amended effective September 1, 1996 (60 FR 61194, 11/29/95)

1. Report test weight to the nearest tenth of a pound.
2. Eliminate the count limit on stones and reduce the U.S. Sample grade aggregate weight tolerance from more than 0.2 percent by weight to more than 0.1 percent by weight.
3. Offer stress crack testing as official criteria (effective January 1, 1996).

## **SUBPART E. FEED OATS AND MIXED FEED OATS**

Established effective September 1, 1925

Revised effective July 2, 1934

1. Changed the definition for oats so that oats containing more than 10 percent of wild oats was classified as feed oats and was graded under the grades of feed oats rather than as Sample grade oats as was the case before this change.
2. Established special grades for Tough, Bleached, Weevily, Smutty, and Ergoty feed oats and Mixed feed oats.

Amended effective July 1, 1935

1. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.
2. Added a definition for fine seeds.
3. Changed the special grades for Smutty feed oats and Smutty mixed feed oats to provide for percentage determination instead of smutball count determination.

Canceled effective June 1, 1959

Mixtures of oats and wild oats, not coming within the requirements of the oats standards, would be graded under the mixed grain standards effective August 1, 1959.

## SUBPART F. FLAXSEED

Established effective August 1, 1934

Amended effective July 1, 1935

1. Required that dockage be expressed in whole percent instead of in whole and half percent.
2. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include flaxseed which contains more than two crotalaria seeds in 1,000 grams.

Revised effective July 15, 1965

1. Lowered the maximum moisture limits in the numerical grades from 11.0 percent to 9.5 percent.
2. Provided maximum limits for heat-damaged flaxseed of 0.2 percent in grade No. 1 and 0.5 percent in grade No. 2. The previous standards had no limit for this factor.
3. Reduced maximum limits of damaged flaxseed in grade No. 1 from 20 percent to 10.0 percent and in grade No. 2 from 30 percent to 15.0 percent.
4. The definition of Sample grade was made more specific by including castor beans, crotalaria seed, stones, unknown foreign substances, and commonly recognized harmful or toxic substances.
5. The flaxseed standards were recodified in the interest of clarity and to conform to the codification used in the wheat standards.

Amended effective February 28, 1970

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the flaxseed standards changed from "Official Grain Standards of the United States for Flaxseed" to "United States Standards for Flaxseed."



Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Flaxseed, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Revised effective July 13, 1986 (49 FR 49427, 12/20/84)

1. Updated the format of the standards to conform to other grain standards.
2. Deleted moisture content as a criterion in designating flaxseed Sample grade.
3. Included in the definition of Sample grade specific limits for stones, pieces of glass, castor beans, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), rodent pellets, bird droppings, and other animal filth.
4. Deleted flaxseed from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly low quality) and included the numerical limit for crotalaria seeds in the Sample grade definition.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

## **SUBPART G. MIXED GRAIN**

Established effective July 2, 1934

Amended effective July 25, 1934

Provided that the quantity of smut in the special grade Smutty mixed grain in which wheat or rye predominates be increased from 10 to 14 smut balls of average size in 250 grams of grain.

Amended effective July 1, 1935

1. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method for the kind of grain which predominates in the mixture or any method which gives equivalent results.
2. Provided that the grade designation for Mixed Grain include the name and approximate percentage of each kind of grain in the mixture.
3. Changed the special grade Smutty mixed grain to provide that mixed grain in which oats predominates should be determined on the basis of weight rather than on the basis of number of smut balls in 250 grams of mixed grain.

Revised effective August 1, 1959

1. Added definitions for wild oats and stones.
2. Provided for certain mixtures of oats and wild oats which had previously been graded Feed Oats and Mixed Feed Oats and which did not fall into the oats standards as revised June 1, 1959.

Revised effective December 1, 1960

1. Added a definition for mixed feed oats.
2. Provided grades for No. 1 and No. 2 Mixed Feed Oats based on the quality factors of foreign material, damaged kernels, heat-damaged kernels and test weight per bushel.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include grain which contains more than two crotalaria seeds in 1,000 grams.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the mixed grain standards changed from "Official Grain Standards of the United States for Mixed Grain" to "United States Standards for Mixed Grain."

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot may be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Mixed Grain, than the grade specified by the contract; i.e., U.S. No. 2 or better.

Revised effective January 28, 1985 (49 FR 3445, 1/27/84)

1. Updated the format of the standards to conform to other grain standards.
2. Deleted all reference to mixed feed oats and wild oats from the standards.
3. Deleted the special grade "Tough mixed grain."
4. Tightened the limit for the special grade "Ergoty mixed grain" to 0.10 percent from 0.30 percent.
5. Redefined mixed grain by incorporating a minimum requirement of 50 percent of whole kernels of grain for which standards have been established, and/or whole and broken soybeans which will not pass through a 5/64-inch triangular-hole sieve, and/or whole flaxseed passing through the sieve.
6. Included a new factor, "Foreign material and fines."
7. Changed the basis for determining the percentage of each type of grain present in the mixture and the amount of damaged kernels, to the basis of the grain after sieving with a 5/64-inch triangular-hole sieve.
8. Deleted mixed grain from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly low quality) and included the numerical limit for crotalaria seeds in the requirements for Sample grade Mixed Grain.
9. Required that the special grades "Smutty mixed grain" and "Garlicky mixed grain" be applicable to mixtures in which triticale predominates.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

## SUBPART H. OATS

Established effective June 16, 1919

Amended effective August 15, 1924

Changed the grading of oats infested with live weevils from Sample grade to a grade Weevily oats.

Revised effective September 1, 1925

1. Changed definition of oats from cultivated oats with “not more than 25 percent of foreign material, other grains, and wild oats” to “any grain which consisted of 80 percent or more cultivated oats and not more than 10 percent of foreign material.”
2. Dropped the grade Clipped Oats.

Amended effective August 30, 1928

Established a grade for Cereal oats.

Revised effective July 2, 1934

1. Changed definition of oats to permit not more than 10 percent of wild oats.
2. Liberalized the factor of general appearance. Stained appearance was eliminated, but slightly weathered oats was to be graded not higher than No. 3, and badly stained or materially weathered was to be graded not higher than No. 4.
3. Raised test weight in grades Nos. 2, 3, and 4 from 29, 26, and 23 pounds to 30, 27, and 24 pounds.
4. Lowered sound cultivated oats in grades No. 1 and No. 2 from 98 and 95 percent to 97 and 94 percent.
5. Provided that musty oats be graded Sample grade instead of No. 4.
6. Redesignated the grades for Bleached oats, Weevily oats, and Cereal oats as special grades and established special grades for Tough oats, Heavy oats, Extra Heavy oats, Bright oats, Smutty oats, Ergoty oats, and Garlicky oats.
7. The special grade Cereal oats was based on “more than 20 percent of oats and/or other matter passing 0.064 x 3/8-inch slotted sieve” instead of on appearance of being sized.

Amended effective July 1, 1935

1. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.

2. Increased maximum limits of foreign material in grades No. 2 and No. 3 from 2 and 3 percent to 3 and 4 percent.
3. Amended special grade Cereal oats to exclude fine seeds. Fine seeds defined so they functioned as part of foreign material.
4. Changed the determination of Smutty oats from “in excess of a quantity equal to 30 balls of average size in 250 grams of oats” to “smut masses or smut balls in excess of 0.2 percent.”

Amended effective July 1, 1937

Changed special grade Cereal oats to special grade Thin oats.

Amended effective July 1, 1941

Provided a special grade Special Red Oats for Columbia or other red oats having similar characteristics.

Amended effective July 1, 1947

Provided for a special grade Medium oats for grades Nos. 3 and 4 and Sample grade for oats having test weight of 30 or more but less than 35 pounds.

Revised effective June 1, 1959

1. Changed the minimum test weight per bushel from 32, 30, 27, and 24 pounds to 34, 32, 30, and 27 pounds for grades Nos. 1 to 4.
2. Changed the minimum test weight per bushel from 35 pounds to 36 pounds for the special grade Heavy oats.
3. Changed the minimum moisture requirements for tough oats from 14.5 percent to 14.0 percent.
4. The various classes of oats were more specifically defined, and other physical characteristics in addition to color were included in their determination.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include oats which contain more than two crotalaria seeds in 1,000 grams.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the oats standards changed from “Official Grain Standards of the United States for Oats” to “United States Standards for Oats.”

Revised effective June 1, 1975 (39 FR 32125, 9/5/74)

1. All class names deleted.
2. Increased the minimum test weight requirement for grade U.S. No. 1 from 34 pounds to 36 pounds and for grade U.S. No. 2 from 32 pounds to 33 pounds.
3. Increased the test weight requirement for Extra-heavy oats from 38 pounds or more to 40 pounds or more and for Heavy oats from 36 pounds or more but less than 38 pounds to 38 pounds or more but less than 40 pounds.
4. Tightened the allowable limits of ergot by requiring that oats which contain ergot in excess of 0.10 percent be graded Ergoty oats.

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Oats, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective April 14, 1986 (49 FR 49431, 12/20/84)

1. Deleted the special grade “Tough oats.”
2. Deleted moisture content as a criterion in designating oats Sample grade.
3. Included in the definition of Sample grade specific limits for broken glass, castor beans, particles of an unknown foreign substance(s), or a commonly recognized harmful or toxic substance(s), cockleburrs, rodent pellets, bird droppings, and other animal filth.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade “weevily” to “infested” to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for “infested.”

## SUBPART I. RYE

Established effective July 1, 1923

Amended effective August 15, 1924

Liberalized the factor of heat-damaged kernels in grades No. 1 and No. 2 from no heat damage in either grade to 0.1 and 0.2 percent.

Revised effective July 2, 1934

1. Eliminated moisture as a numerical grading factor and established a special grade Tough rye containing more than 14 percent but not more than 16 percent moisture.
2. Provided that musty and slightly sour rye be graded Sample grade instead of No. 4.
3. Provided that moisture be determined on dockage-free grain.
4. Redesignated the grade Garlicky rye as a special grade and changed requirements for this grade from "one or more garlic bulblets" to "two or more green garlic bulblets or an equivalent quantity of dry or partly dry bulblets" per 1,000 grams of rye. Divided the special grade into Light Garlicky and Garlicky rye, based on the number of bulblets.
5. Redesignated the grade Smutty rye as a special grade, changed the requirements from "in excess of a quantity equal to 2 balls of average size in 50 grams" to "in excess of a quantity equal to 10 balls of average size in 250 grams" of rye, and divided the special grade into Light Smutty and Smutty rye based on the quantity of smut.
6. Changed the definition of rye to permit not more than 10 percent of other grains before the removal of the dockage.

Amended effective July 25, 1934

Increased the amount of smut in the special grade Smutty rye from "in excess of a quantity equal to 10 balls of average size" to "in excess of a quantity equal to 14 balls of average size" in 250 grams of rye.

Amended effective July 1, 1935

Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.

Amended effective July 1, 1941

Provided a special grade for Plump rye and maximum limits of Thin rye in grades Nos. 1, 2, and 3.



Amended effective July 1, 1951

Decreased the maximum limits of Thin rye permitted in grades Nos. 1, 2, and 3 from 20, 20, and 30 percent to 10, 15, and 25 percent.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include rye which contains more than two crotalaria seeds in 1,000 grams.

Amended effective March 30, 1969

A new section "Grade Designations" added to conform in format to other grain standards.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the rye standards changed from "Official Grain Standards of the United States for Rye" to "United States Standards for Rye."

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Rye, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Revised effective May 25, 1985 (49 FR 22060, 5/25/84)

1. Updated the format of the standards to conform to other grain standards.
2. Deleted the special grade "Tough rye."
3. Included in the definition of Sample grade specific limits for stones, pieces of glass, castor beans, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), rodent pellets, bird droppings, and other animal filth.

4. Deleted moisture content as a criterion in designating rye Sample grade.
5. Deleted rye from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly low quality) and included the numerical limit for crotalaria seeds in the Sample grade definition.
6. Smut balls, in addition to being considered in determining the special grade, also are considered foreign material.
7. Deleted the presence of a quantity of smut so great that one or more grade requirements cannot be accurately determined as a criterion in designating rye Sample grade.
8. Ergot is stated in hundredth percent.
9. Raised the limit for heat-damaged kernels in grade U.S. No. 1 to 0.2 percent from 0.1 percent.
10. Reduced the maximum number of rodent or bird pellets or other animal filth permitted in the numerical grades to 1 from 2.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade “weevily” to “infested” to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for “infested.”

Revised effective June 1, 1999 (63 FR 20054, 4/23/98)

Amended Subpart A--General Provisions by revising the method of recording the percentage of dockage in rye from whole percent with fractions of a percent being disregarded to the nearest tenth percent.

## SUBPART J. SORGHUM

Established effective December 1, 1924

Revised effective September 1, 1934 (03/31/34 FR)

1. Class names were changed from types such as Kafir, Milo, etc., to class names based on color such as White Grain Sorghums, Yellow Grain Sorghums, etc. Some subclass names were based on type characters and others on color.
2. A dockage system was set up instead of the subfactor "sand, dirt, and finely broken kernels" in the factor "foreign material and cracked kernels."
3. Provided that musty and sour sorghum be graded Sample grade instead of No. 4.
4. Eliminated general appearance from numerical grades and established special grades for Bright and Discolored grain sorghums.
5. Added "other grains" to the factor cracked kernels and foreign material, and increased the amount allowed in grades Nos. 1 to 3 from 3, 6, and 10 percent to 4, 8, and 12 percent.
6. Revised damaged kernels definition to include damaged kernels of other grains and nongrain sorghums.
7. Redesignated the grades for Weevily and Smutty grain sorghums as special grades and revised the special grade for Smutty grain sorghums by eliminating odor as a factor and specified a quantity of smut equal to 10 smut masses in 50 grams of grain sorghums.
8. Changed the definition of foreign material and cracked kernels to cracked kernels, foreign material and other grains and changed the sieve used to determine this factor from one with an 8/64-inch triangular hole to one with a 5/64-inch triangular hole, a somewhat smaller opening.

Amended effective July 1, 1935 (3/28/35 FR)

1. Required dockage to be expressed in whole percent instead of in whole and half percent.
2. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include sorghum which contains more than two crotalaria seeds in 1,000 grams.

Revised effective August 1, 1962 (3/31/62 FR)

1. Provided four classes: Yellow Grain Sorghum, White Grain Sorghum, Brown Grain Sorghum, and Mixed Grain Sorghum. The class Red Grain Sorghum was dropped and all subclasses were eliminated.
2. Provided that white grain sorghum with brown undercoats be classed as Brown Grain Sorghum.
3. Changed the minimum test weight per bushel from 55, 53, 51, and 49 pounds for grades Nos. 1 to 4 to 57, 55, 53, and 51 pounds.
4. Changed the maximum moisture limits from 14, 15, and 16 percent in grades Nos. 1 through 3 to 13.0, 14.0, and 15.0 percent. No change was made in the maximum moisture limits of grade No. 4.
5. Eliminated the grading factor nongrain sorghums and included nongrain sorghum in the definition of other grains.
6. Eliminated the special grades Bright grain sorghums and Discolored grain sorghums and provided that grain sorghum which is distinctly discolored shall be graded not higher than No. 3.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the grain sorghum standards changed from "Official Grain Standards of the United States for Grain Sorghum" to "United States Standards for Grain Sorghum."

Revised effective June 1, 1974 (39 FR 3943, 1/31/74)

1. Changed the designation grain sorghum to sorghum.
2. Redefined the class White Sorghum to permit the inclusion of not more than 2.0 percent of sorghum of other colors.
3. Redefined the class Yellow Sorghum to include sorghum with white pericarps which contain more than 2.0 percent of sorghum of other colors but not more than 10.0 percent of sorghum with brown pericarps or brown subcoats.

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Sorghum, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective July 1, 1984 (48 FR 44169, 9/28/83)

Redefined the class White sorghum to include sorghum with translucent pericarps, and white-colored sorghum containing spots which singly or in combination cover 25.0 percent or less of the kernels. Concurrently, sorghum with white but spotted pericarps was deleted from the definition of the class Yellow sorghum.

Amended effective September 9, 1985 (49 FR 35744, 9/12/84)

Deleted moisture content as a grade-determining factor.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade “weevily” to “infested” to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for “infested.”

Revised effective June 1, 1993 (57 FR 58967, 12/14/92)

1. Reduced the maximum BNFM limits for U.S. Nos. 2, 3, and 4 from 8.0, 12.0, and 15.0 percent to 7.0, 10.0, and 13.0 percent, respectively; and established grade limits for foreign material for U.S. Nos. 1 (1.5%), 2 (2.5%), 3 (3.5%), and 4 (4.5%).
2. Reduced the amount of Brown sorghum allowed in Yellow sorghum from 10.0 percent to 3.0 percent.
3. Modified the classification terminology Yellow sorghum to “Sorghum” and Brown sorghum to “Tannin” sorghum.
4. Revised the definitions for all classes to reflect the changes.

1. Deleted the reference to tannin content from definitions of Sorghum, Tannin sorghum and White sorghum, and defined these classes based on the presence or absence of a pigmented testa (subcoat);
2. Revised the definition of nongrain sorghum by deleting sorghum-sudangrass hybrids, sorgrass, and added language referencing seeds of *Sorghum bicolor* (L.) Moench that appear atypical of grain sorghum;
3. Reduced the grading limits for broken kernels and foreign material (BNFM) and the subfactor foreign material (FM);
4. Inserted a total count limit of 10 for other material used to determine sample grade factors;
5. Revised the certification of sorghum test weight to tenths of a pound per bushel;
6. Revised the sorghum breakpoints and associated grade limits for U.S. Nos. 1, 2, 3, and 4 BNFM and FM.

## **SUBPART K. SOYBEANS**

### Established effective November 20, 1940

Standards for soybeans were recommended by the U.S. Department of Agriculture in 1925. These standards were revised in 1935 and brought under the U.S. Grain Standards Act by an amendment to the Act in 1940.

### Revised effective September 1, 1941

1. Increased the percentage of splits in grades No. 1 and No. 2 from 1.0 and 10.0 percent to 10 and 15 percent.
2. Reduced the maximum moisture limits from 15.0, 15.0, and 16.5 percent in grades Nos. 1, 2, and 3 to 13, 14, and 16 percent.
3. Established a dockage system based on an 8/64-inch round hole sieve and expressed on the certificate in terms of whole percent. A fraction of a percent was disregarded.
4. Increased the maximum percentage of foreign material from 0.5, 2.0, 4.0, and 6.0 percent in grade Nos. 1 through 4 to 1, 2, 3, and 5 percent.
5. Increased the maximum percentage of damaged kernels permitted in grade No. 1 from 1.5 to 2 percent.
6. The factor "other colors" was eliminated in the grade table. A footnote was added which applied to the No. 1 and No. 2 grade, providing that grade No. 1 of each of the classes Yellow Soybeans and Green Soybeans may contain not more than 2 percent and that grade No. 2 of each of these classes may contain not more than 3 percent of black, brown, or bicolored soybeans singly or combined.
7. Limits for other classes were changed. Brown and black soybeans may contain not more than 10 percent of soybeans of other colors and yellow and green soybeans may contain not more than 10 percent of other colors, including not more than 5 percent of brown, black, or bicolored soybeans.
8. Established a special grade Weevily soybeans.

### Amended effective September 1, 1942

Changed the method of determining moisture from the water-oven to the air-oven.



#### Revised effective September 1, 1949

1. Classifying a part of the foreign material as dockage was eliminated.
2. The maximum limits of splits were increased from 15, 20, and 30 percent for grades Nos. 2, 3, and 4 to 20, 30, and 40 percent.
3. The maximum limits for foreign material were increased from 1, 2, 3, and 5 percent for grades Nos. 1 through 4 to 2.0, 3.0, 4.0, and 6.0 percent. This change was necessary due to elimination of the dockage factor.
4. The definitions for the classes Yellow Soybeans and Green Soybeans were changed to provide that all soybeans with yellow or green seedcoats which were yellow in cross section be classified as yellow soybeans and only soybeans that were green in cross section and had green seedcoats be classified as green soybeans.
5. Established a special grade Garlicky soybeans.

#### Revised effective September 1, 1955

1. Reduced the foreign material in the numerical grades from 2.0, 3.0, 4.0, and 6.0 percent to 1.0, 2.0, 3.0, and 5.0 percent.
2. Fixed special limits on heat damage of 0.2, 0.5, 1.0, and 3.0 percent in the numerical grades.
3. Redefined splits as pieces of soybeans that are not damaged.
4. Required that purple mottled and stained soybeans be graded not higher than No. 3.

#### Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include soybeans which contain more than two crotalaria seeds in 1,000 grams.

#### Amended effective October 30, 1963

Provided that the term purple mottled or stained includes soybeans which are discolored by a fungus. Purple mottled or stained soybeans would be graded not higher than No. 3.

#### Amended effective March 22, 1966

Provided that the term bicolored soybeans be construed to include soybeans with seedcoats of two colors, one of which is black or brown, when the black and/or brown color covers 50 percent or more of the seedcoat. The hilum of a soybean is not considered a part of the seedcoat.

Amended effective September 1, 1969 (34 FR 7282, 5/3/69)

Stinkbug-stung kernels considered damaged kernels at the rate of one-fourth of the actual percentage of the stung kernels.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the soybean standards changed from “Official Grain Standards of the United States for Soybeans” to “United States Standards for Soybeans.”

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Soybeans, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Revised effective September 9, 1985 (50 FR 18455, 5/1/85)

1. Updated the format of the standards to conform to other grain standards.
2. Deleted the classes Green, Black, and Brown soybeans and included them under the definition of Soybeans of other colors.
3. Included in the definition of Sample grade specific limits for stones, pieces of glass, castor beans, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), rodent pellets, bird droppings, and other animal filth.
4. Deleted soybeans from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly low quality) and included the numerical limit for crotalaria seeds in the Sample grade definition.
5. Deleted § 810.902 Interpretation with respect to the term “Purple mottled or stained” and included a definition for the term under Terms Defined.
6. Deleted moisture content as a grade-determining factor.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade “weevily” to “infested” to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for “infested.”

Revised effective September 1, 1994 (59 FR 10569, 3/7/94)

1. Revised the reporting requirements to report the percentage of splits in tenths percent.
2. Reduced the U.S. Sample grade criteria for stones from eight or more to four or more and reduce the U.S. Sample grade aggregate weight criteria for stones from more than 0.2 percent by weight to more than 0.1 percent by weight.
3. Reduced the U.S. Sample grade criteria for pieces of glass from two to zero.
4. Eliminated the grade limitation on purple mottled or stained soybeans and establish a special grade, Purple Mottled or Stained.
5. Eliminated the grade limitation on soybeans that are materially weathered.
6. Clarified the reference to Mixed soybeans.
7. Established a cumulative total for factors which may cause a sample to grade U.S. Sample grade.

Revised effective September 1, 2007 (71 FR 52403,9/6/06)

1. Changed the minimum test weight per bushel (TW) from a grade determining factor to an informational factor.
2. Revised the reporting requirements for TW from whole and half pounds with a fraction of a half pound disregarded to reporting to the nearest tenth of a pound.

## **SUBPART L. SUNFLOWER SEED**

Established effective September 1, 1984 (49 FR 22761, 6/1/84)

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade “weevily” to “infested” to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for “infested.”

## SUBPART M. TRITICALE

Established effective May 1, 1977 (42 FR 9377, 2/16/77)

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Triticale, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective May 1, 1986 (49 FR 49424, 12/20/84)

1. Reduced the limit for castor beans permitted in the numerical grades to 1 from 2.
2. Deleted the presence of a quantity of smut so great that one or more grade requirements cannot be accurately determined as a criterion in designating triticale Sample grade.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

## SUBPART N. WHEAT

Established standards for Hard Red Winter Wheat, Soft Red Winter Wheat, Common White Wheat, and Club Wheat effective July 1, and standards for all other wheat effective August 1, 1917

Revised effective July 15, 1918

1. Eliminated the subclasses Red Spring Humpback and Soft Red. Wheat of the variety Humpback was included in the subclass Red Spring. A grade "Garlicky" was established which applied to all classes and took the place of subclass Soft Red in the class Soft Red Winter Wheat. The class name Common and Red Durum Wheat was changed to Durum Wheat.
2. Changed the minimum limits of dark, hard, and vitreous kernels in the subclass Dark Hard Spring from 85 percent to 75 percent, in the subclass Dark Hard Winter from 90 percent to 80 percent, and for No. 1 Dark Hard Winter from 95 percent to 80 percent.
3. Changed the definition for the subclass Hard White from "not more than 20 percent of kernels of soft and chalky texture" to "75 percent or more of hard (not soft and chalky) kernels," and for the subclass Soft White from "more than 20 percent of kernels of soft and chalky texture" to "less than 75 percent of hard (not soft and chalky) kernels."
4. Changed the minimum test weight per bushel for grade No. 1 for all subclasses of Hard Red Spring Wheat from 59 pounds to 58 pounds. Changed the minimum test weight per bushel for all subclasses of Durum Wheat, Hard Red Winter Wheat, and the subclass Red Winter of the class Soft Red Winter Wheat from 61, 59, 57, 55, and 53 pounds for grades Nos. 1 through 5 to 60, 58, 56, 54, and 51 pounds. Changed the minimum test weight per bushel for the subclass Red Walla of the class Soft Red Winter Wheat from 60, 58, 56, 54, and 52 pounds for grades Nos. 1 through 5 to 58, 56, 54, 52, and 49 pounds, and from 52 pounds to 51 pounds for grade No. 5 for all subclasses of White Wheat.
5. Changed the maximum limits of damaged kernels in grade No. 1 from 1 percent to 2 percent and of heat-damaged kernels from no heat-damaged kernels and 0.1 percent in grades No. 1 and No. 2 to 0.1 percent and 0.2 percent.
6. Changed the names of grading factors "Inseparable foreign material" and "Kinghead, corncockle, vetch, darnel, and wild rose" to "Foreign material other than dockage" and "Matter other than cereal grains." Changed the maximum limits of foreign material other than dockage from 0.5, 1, 2, 4, and 6 percent for grades Nos. 1 through 5 to 1, 2, 3, 5, and 7 percent, and of matter other than cereal grains from 0.25, 0.5, 1, 2, and 3 percent for grades Nos. 1 through 5 to 0.5, 1.0, 2.0, 3.0, and 5.0 percent.

7. Changed the maximum limits of wheats of other classes for all classes except Durum Wheat from 2, 4, and 6 percent in grades Nos. 1, 2, and 3 to 5, 10, and 10 percent.

Changed the maximum limits of wheats of other classes in the subclasses Amber Durum and Durum in the class Durum Wheat from 2 percent in grade No. 1 to 5 percent.

Changed the maximum limits of wheat of other classes in the subclass Red Durum in the class Durum Wheat from 2, 4, and 6 percent for grades Nos. 1 through 3 to 5, 10, and 10 percent.

Changed the maximum limits of Common White, White Club, and Durum Wheat, singly or combined, in the classes Hard Red Spring Wheat and Hard Red Winter Wheat from 1, 2, 3, 5, and 5 percent for grades Nos. 1 through 5 to 2, 5, 10, 10, and 10 percent.

Changed the maximum limits of Soft Red Winter, Common White, and White Club wheat, singly or combined, in the subclasses Amber Durum and Durum of the class Durum Wheat from 1, 5, 5, 5, and 5 percent in grades Nos. 1 through 5 to 2, 5, 10, 10, and 10 percent.

Changed the maximum limits of Soft Red Winter, Common White, and White Club wheat, singly or combined, in the subclass Red Durum of the class Durum Wheat from 1, 2, 3, 5, and 5 percent for grades Nos. 1 through 5 to 2, 5, 10, 10, and 10 percent.

Changed the maximum limits of Durum wheat in the classes Soft Red Winter Wheat and White Wheat from 1 percent in each of the grades Nos. 1 through 5 to 2, 3, 10, 10, and 10 percent.

8. Changed the maximum moisture limits for the classes Hard Red Spring Wheat and Durum Wheat from 13.5, 14.5, 14.5, 15.5, and 15.5 percent for grades Nos. 1 through 5 to 14.0, 14.5, 15.0, 16.0, and 16.0 percent.

Changed the maximum moisture limits for the classes Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat from 13, 13, 14, 14, and 15 percent for grades Nos. 1 through 5 to 13.5, 14.0, 14.5, 15.5, and 15.5 percent.

9. Added a grade for Garlicky wheat, Treated wheat, and Smutty wheat and changed the method of expressing the grades for Mixed Wheat.
10. Excluded emmer, spelt, and einkorn from the definition for wheat.
11. Changed the method of expressing dockage from whole and half percent to whole percent.



Amended effective August 15, 1921

Eliminated “bright” from the No. 1 grade requirements.

Amended effective July 17, 1922

Combined the classes Common White Wheat and White Club Wheat into one class White Wheat with three subclasses Hard White, Soft White, and Western White. In the class Soft Red Winter Wheat, changed the subclass Red Walla to Western Red.

Amended effective August 15, 1924

1. Established the grade No. 1 Hard Spring for Hard Red Spring Wheat with 85 percent or more dark, hard, and vitreous kernels and test weight of not less than 60 pounds.
2. Provided grades for Mixed Durum, for Mixed Wheat with more than 70 percent of Durum and not more than 5 percent of Soft Red Winter and/or White Wheat.
3. Changed the test weight per bushel requirements for the several numerical grades of the subclass Western Red from 58, 56, 54, 52, and 49 to 60, 58, 56, 54, and 51.
4. Changed the grading of wheat infested with live weevils from Sample grade to a grade Weevily Wheat.
5. Excluded Polish and poulard wheat from the definition of wheat.
6. Revised the definition for treated wheat.

Revised effective July 2, 1934

1. Removed moisture as a specific numerical grading factor and established a special grade Tough wheat for wheat between 14.5 and 16 percent moisture for the classes Hard Red Spring Wheat, Durum Wheat, and Red Durum Wheat and for wheat between 14 and 15.5 percent moisture for the classes Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat. Wheat with more than the maximum moisture permitted in the special grade Tough wheat was graded Sample grade.
2. Divided the class Durum Wheat into two classes, Durum Wheat and Red Durum Wheat. Durum Wheat was divided into three subclasses, Hard Amber Durum, Amber Durum, and Durum. The subclass White Club was added to the class White Wheat, and a slight change was made in the definition of the subclass Western White.
3. Changed the grading of musty and sour wheat from No. 5 to Sample grade.
4. The grade No. 1 Hard Spring was dropped and No. 1 Heavy was adopted for Hard Red Spring Wheat with a test weight of 60 pounds.

5. The minimum percentage of dark, hard, and vitreous kernels in the subclass Dark Hard Winter was changed from 80 percent to 75 percent.
6. Redesignated the grades Treated wheat, Garlicky wheat, Smutty wheat, and Weevily wheat as special grades and added a special grade Ergoty wheat.
7. The special grade Garlicky wheat was liberalized from “one or more garlic bulblets” to “two or more green garlic bulblets or an equivalent quantity of dry or partly dry bulblets” per 1,000 grams of wheat and the special grade was divided into Light garlicky and Garlicky, based on the number of bulblets.
8. The special grade Smutty wheat was liberalized from “in excess of 2 balls of average size in 50 grams of wheat” to “10 balls of average size in 250 grams of wheat,” and the special grade was divided into Light smutty and Smutty based on the quantity of smut.
9. A limit of 10 percent of Red Durum was allowed in Mixed Durum.
10. Damaged and heat-damaged was applied to kernels and pieces of kernels of other grains as well as to the wheat kernels.
11. The determination of other grains in the definition of wheat was on the basis of the wheat before the removal of the dockage rather than on the dockage-free basis as before.
12. Changed the maximum limits of wheats of other classes in all classes of wheat from 5 to 10 percent for grade No. 2.

Amended effective July 25, 1934

Increased the amount of smut in the special grade Smutty wheat from “in excess of a quantity equal to 10 balls of average size,” to “in excess of a quantity equal to 14 balls of average size” in 250 grams of wheat.

Amended effective July 1, 1935

Changed the basic moisture method from the Brown-Duvel to the air-oven or any method giving similar results.

Revised effective October 1, 1937

1. Prescribed the manner in which the grade designation for Mixed Wheat was to be written and changed the grade requirements for Mixed Durum to provide that wheat with not less than 60 percent of kernels that are hard and vitreous and of amber color be designated as Amber Mixed Durum.
2. Provided limits of 7 percent of shrunken and broken kernels in the top two grades and 10 percent in grade No. 3.

Amended effective August 2, 1954

Changed the method of expressing smut dockage.

Revised effective June 15, 1957

1. Changed the maximum limits of foreign material from 1.0, 2.0, 3.0, 5.0, and 7.0 percent in grades Nos. 1 through 5 to 0.5, 1.0, 2.0, 3.0, and 5.0 percent.
2. Eliminated the factor "matter except other grains."
3. Changed the maximum limits of shrunken and broken kernels from 7 percent for grades No. 1 and No. 2 and 10 percent for grade No. 3 to 5.0 percent and 8.0 percent.
4. Changed the maximum limits of wheats of other classes in grade No. 2 from 10 percent to 5.0 percent.
5. Changed the minimum limits of dark, hard and vitreous kernels in the subclass Hard Winter Wheat from 25 percent to 40 percent.
6. Eliminated Amber Mixed Durum and Mixed Durum from the grade designation in the class Mixed Wheat.
7. Provided that distinctly low quality be determined on the basis of the grain as a whole.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include wheat which contains more than two crotalaria seeds in 1,000 grams.

Revised effective June 1, 1964 (29 FR 1309, 2593, 5378, 5/29/64)

1. Changed the method of expressing dockage from whole percent to whole and half percent.
2. Eliminated the subclasses Red Winter Wheat and Western Red Wheat in the class Soft Red Winter Wheat.
3. Provided that the name and percentage of White Club Wheat and other White Wheat be given as a part of the grade designation in the subclass Western White Wheat.
4. The clause "and may include not more than 10.0 percent of wheats of other classes" was deleted from the definition for the classes Hard Red Spring Wheat, Durum Wheat, Red Durum Wheat, Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat.

5. Changed the definition for the class Mixed Wheat.
6. Changed the maximum limits of shrunken and broken kernels from 5.0 percent for grades No. 1 and No. 2 and 8.0 percent for grade No. 3 to 3.0, 5.0, 8.0, 12.0, and 20.0 percent for grades No. 1, No. 2, No. 3, No. 4, and No. 5, respectively.
7. Added a factor "total defects" which included damaged kernels, foreign material, and shrunken and broken kernels and provided maximum limits of 3.0, 5.0, 8.0, 12.0, and 20.0 percent for grades No. 1, No. 2, No. 3, No. 4, and No. 5, respectively.
8. Combined the tables of grade requirements for all classes of wheat into one table.
9. Reduced the minimum moisture requirements for the special grade Tough wheat for the classes Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat from 14.0 percent and for the classes Hard Red Spring Wheat, Durum Wheat, and Red Durum Wheat from 14.5 percent to 13.5 percent for all classes. Eliminated the maximum moisture requirement for the special grade Tough wheat for all classes and deleted reference to moisture in the definition for Sample grade.
10. Provided a special grade Heavy wheat for all classes to be applied to grades No. 1, No. 2, and No. 3. Eliminated the grade No. 1 Heavy in the class Hard Red Spring Wheat.
11. Deleted smut dockage in the special grade Smutty wheat.
12. Moisture in Durum Wheat was rescinded not to become effective until June 1, 1965, so Durum Wheat with over 16 percent moisture is graded Sample grade. Durum Wheat with over 14.5 percent but not over 16.0 percent moisture is graded special grade Tough wheat.
13. Changed the maximum limits of wheat of other classes in grade No. 1 from 5.0 to 3.0 percent. A new factor, Contrasting Classes, was created and defined as: (a) Durum Wheat, Red Durum Wheat, and White wheat in the classes Hard Red Spring Wheat and Hard Red Winter Wheat; (b) Hard Red Spring Wheat, Red Durum Wheat, Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat in the class Durum Wheat; (c) Durum Wheat and Red Durum Wheat in the class Soft Red Winter Wheat; and (d) Durum Wheat, Red Durum Wheat, Hard Red Spring Wheat, and Hard Red Winter Wheat in the class White Wheat. The maximum limits of contrasting classes in all classes of wheat were set at 0.5, 1.0, 2.0, 10.0, and 10.0 for grades No. 1, No. 2, No. 3, No. 4, and No. 5, respectively.

NOTE: The provision rescinding the moisture requirement for Sample grade and the special grade Tough wheat in Durum Wheat until June 1, 1965, was not extended; and on June 1, 1965, the moisture requirement for the special grade Tough wheat was reduced from 14.5 percent to 13.5 percent, and the reference to moisture in the definition in Sample grade was deleted.

Amended effective June 15, 1965

Changed the maximum limits of contrasting classes in grades No. 1, No. 2, and No. 3 from 0.5, 1.0, and 2.0 percent to 1.0, 2.0, and 3.0 percent, respectively, in all classes of wheat except Mixed Wheat.

Amended effective January 31, 1969 (33 FR 16065, 11/1/68)

1. Lowered the test weight per bushel requirements for White Club Wheat to those established for Hard Red Spring Wheat.
2. Redefined Sample grade to include factors previously considered under the term "otherwise of distinctly low quality."

Amended effective March 30, 1969

The wheat standards were assigned new section numbers (§§ 26.101 - 26.129 changed to read §§ 26.301 - 26.329).

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective August 10, 1973 (38 FR 21639, 8/10/73)

The determination for crotalaria seeds, large stones, castor beans, broken glass, animal filth, unknown foreign substances, and commonly recognized harmful or toxic substances changed from the basis of the dockage-free wheat to the basis of the wheat as a whole.

Amended effective January 8, 1974

The name of the wheat standards changed from "Official Grain Standards of the United States for Wheat" to "United States Standards for Wheat."

Revised effective May 1, 1977 (41 FR 26670, 6/29/76)

1. Deleted the class Red Durum Wheat.
2. Established a new class Unclassed Wheat.
3. Deleted the subclasses in the class Hard Red Winter Wheat.
4. Changed the basis of determination for heat-damaged kernels, damaged kernels (total), and foreign material from a dockage-free basis to a dockage and shrunken and broken kernel-free basis.

5. Changed the limits for heat-damaged kernels in grades U.S. Nos. 1 and 2 from 0.1 and 0.2 percent, respectively, to 0.2 percent for both grades.
6. Deleted the special grade Heavy wheat.
7. Deleted the special grade Tough wheat.
8. The components and percentages for the subclass Western White Wheat and the classes Unclassed Wheat and Mixed Wheat to be shown under "Remarks" on the inspection certificate.

Amended effective May 1, 1977 (42 FR 9379, 2/16/77)

1. Section 26.303(b), heading changed to read "Certain Quality Determinations."
2. Included broken glass in the definition of sample grade to correct an inadvertent omission.

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Wheat, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective May 1, 1985 (49 FR 20640, 5/16/84)

1. Deleted the special grade "Light garlicky wheat." The special grade "Garlicky wheat" is redefined as wheat containing more than 2 green bulblets or an equivalent quantity of dry or partly dry bulblets in 1,000 grams. The work portion is reduced to 250 grams for counts in excess of 10 green garlic bulblets.
2. Reduced the limit for castor beans permitted in the numerical grades to 1 from 2.
3. Clarified the grade chart to show that when Hard Red Spring wheat or White Club wheat predominates in Mixed wheat, the test weight requirements for those wheats would apply.
4. Deleted the presence of a quantity of smut so great that one or more grade requirements cannot be accurately determined as a criterion in designating wheat Sample grade.

5. The components of the subclass Western White wheat are listed in the order of predominance on the official certificate.
6. Changed inspection procedures so the factors wheat of other classes, contrasting classes, and subclasses are analyzed on a work portion of wheat free from dockage and shrunken and broken kernels.

Revised effective May 1, 1987 (52 FR 30325, 8/26/86)

Revised § 810.305(b) to state the percentage of dockage in whole and tenth percents to the nearest 0.1 percent.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade “weevily” to “infested” to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for “infested.”
3. Revised the definition for Sample grade to include a limit of 32 insect-damaged kernels per 100 grams of representative sample.

Revised effective May 1, 1990 (54 FR 48735, 11/27/89)

Replaced the single class White wheat with two classes, Hard White wheat and Soft White wheat. The class Soft White wheat has three subclasses, Common White wheat, White Club wheat, and Western White wheat. The class Hard White wheat has no subclasses. This changes provides greater consistency in applying the standards; makes the standards easier to interpret; and facilitates trade in both hard and soft white wheat.

Revised effective May 1, 1993 (57 FR 58966, 12/14/92)

1. Removed the description Red Durum wheat from the definition of Unclassed wheat.
2. Tightened the limit for stones from 8 or more to 4 or more and reduced the aggregate weight criteria from more than 0.2 percent by weight to more than 0.1 percent by weight.
3. Reduced the tolerances for pieces of glass from 2 or more to 1 or more (0 tolerance).

4. Established a cumulative total for factors which may cause a sample to grade U.S. Sample grade. Any combination of stones, crotalaria seeds, castor beans, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance, or animal filth per 1,000 grams would cause the wheat to be graded U.S. Sample grade if the total exceeds a count of 4.
5. Tightened the limit for ergot from 0.30 percent to 0.05 percent by weight.
6. Tightened the limit for the special grade "Light smutty" wheat from more than 14 smut balls to more than 5 smut balls.
7. Tightened the limits for foreign material for U.S. Nos. 1, 2, and 3 to 0.4, 0.7, and 1.3 percent, respectively.

Revised effective May 1, 2006 (70 FR 8233, 02/18/05)

1. Changed the definition of contrasting classes in Hard Red Winter wheat and Hard Red Spring wheat such that Hard White wheat is not a contrasting class but is considered as wheat of other classes.
2. Added the sample size used to determine sample grade factors.

Revised effective May 1, 2014 (78 FR 27857, 05/13/13)

Changed the definition of contrasting classes in Hard White wheat such that Hard Red Winter wheat and Hard Red Spring wheat are not contrasting classes but are considered as wheat of other classes.



# U.S. Standards

August 2018

**Subpart B -- United States Standards for Barley**

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## Terms Defined

### § 810.201 Definition of barley.

Grain that, before the removal of dockage, consists of 50 percent or more of whole kernels of cultivated barley (*Hordeum vulgare* L.) and not more than 25 percent of other grains for which standards have been established under the United States Grain Standards Act. The term “barley” as used in these standards does not include hull-less barley or black barley.

### § 810.202 Definition of other terms.

(a) *Black barley*. Barley with black hulls.

(b) *Broken kernels*. Barley with more than 1/4 of the kernel removed.

(c) *Classes*. There are two classes of barley: Malting barley and Barley.

(1) *Malting barley* is divided into the following two subclasses:

(i) *Six-rowed Malting barley* has a minimum of 95.0 percent of a six-rowed suitable malting type that contains not more than 1.9 percent injured-by-frost kernels, 0.4 percent frost-damaged kernels, 0.2 percent injured-by-heat kernels, 0.1 percent heat-damaged kernels, 1.9 percent injured-by-mold kernels, and 0.4 percent mold-damaged kernels. Six-rowed Malting barley must not be infested, blighted, ergoty, garlicky, or smutty as defined in §810.107(b) and §810.206.

(ii) *Two-rowed Malting barley*. Barley that has a minimum of 95.0 percent of a two-rowed suitable malting type that contains not more than 1.9 percent injured-by-frost kernels, 0.4 percent frost-damaged kernels, 0.2 percent injured-by-heat kernels, 0.1 percent heat-damaged kernels, 1.9 percent injured-by-mold kernels, and 0.4 percent mold-damaged kernels. Two-rowed Malting barley must not be infested, blighted, ergoty, garlicky, or smutty as defined in § 810.107(b) and § 810.206.

(2) *Barley*. Any barley of a six-rowed or two-rowed type. The class Barley is divided into the following three subclasses:

(i) *Six-rowed barley*. Any six-rowed barley that contains not more than 10.0 percent of two-rowed varieties.

(ii) *Two-rowed barley*. Any two-rowed barley with white hulls that contains not more than 10.0 percent of six-rowed varieties.

(iii) *Barley*. Any barley that does not meet the requirements for the subclasses Six-rowed barley or Two-rowed barley.

(d) *Damaged kernels*. Kernels, pieces of barley kernels, other grains, and wild oats that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, injured-by-heat, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

(e) *Dockage*. All matter other than barley that can be removed from the original sample by use of an approved device according to procedures prescribed in FGIS instructions. Also, underdeveloped, shriveled, and small pieces of barley kernels removed in properly separating the material other than barley and that cannot be recovered by properly rescreening or recleaning.

(f) *Foreign material*. All matter other than barley, other grains, and wild oats that remains in the sample after removal of dockage.

(g) *Frost-damaged kernels*. Kernels, pieces of barley kernels, other grains, and wild oats that are badly shrunk and distinctly discolored black or brown by frost.

(h) *Germ-damaged kernels*. Kernels, pieces of barley kernels, other grains, and wild oats that have dead or discolored germ ends.

(i) *Heat-damaged kernels*. Kernels, pieces of barley kernels, other grains, and wild oats that are materially discolored and damaged by heat.

(j) *Injured-by-frost kernels*. Kernels and pieces of barley kernels that are distinctly indented, immature, or shrunk in appearance or that are light green in color as a result of frost before maturity.

(k) *Injured-by-heat kernels*. Kernels, pieces of barley kernels, other grains, and wild oats that are slightly discolored as a result of heat.

(l) *Injured-by-mold kernels*. Kernels and pieces of barley kernels containing slight evidence of mold.

(m) *Mold-damaged kernels*. Kernels, pieces of barley kernels, other grains, and wild oats that are weathered and contain considerable evidence of mold.

(n) *Other grains*. Black barley, corn, cultivated buckwheat, einkorn, emmer, flaxseed, guar, hull-less barley, nongrain sorghum, oats, Polish wheat, popcorn, poulard wheat, rice, rye, safflower, sorghum, soybeans, spelt, sunflower seed, sweet corn, triticale, and wheat.

(o) *Plump barley*. Barley that remains on top of a 6/64 x 3/4 slotted-hole sieve after sieving according to procedures prescribed in FGIS instructions.

(p) *Sieves*.

(1) 5/64 x 3/4 slotted-hole sieve. A metal sieve 0.032 inch thick with slotted perforations 0.0781 (5/64) inch by 0.750 (3/4) inch.

(2) 5.5/64 x 3/4 slotted-hole sieve. A metal sieve 0.032 inch thick with slotted perforations 0.0895 (5.5/64) inch by 0.750 (3/4) inch.

(3) 6/64 x 3/4 slotted-hole sieve. A metal sieve 0.032 inch thick with slotted perforations 0.0937 (6/64) inch by 0.750 (3/4) inch.

(q) *Skinned and broken kernels*. Barley kernels that have one-third or more of the hull removed, or that the hull is loose or missing over the germ, or broken kernels, or whole kernels that have a part or all of the germ missing.

(r) *Sound barley*. Kernels and pieces of barley kernels that are not damaged as defined under (d) of this section.

(s) *Suitable malting type*. Varieties of malting barley that are recommended by the American Malting Barley Association and other malting type(s) used by the malting and brewing industry. The varieties are listed in AMS's instructions.

(t) *Thin barley*. Thin barley shall be defined for the appropriate class as follows:

(1) *Malting barley*. Six-rowed Malting barley that passes through a 5/64 x 3/4 slotted-hole sieve and Two-rowed Malting barley which passes through a 5.5/64 x 3/4 slotted-hole sieve in accordance with procedures prescribed in AMS's instructions.

(2) *Barley*. Six-rowed barley, Two-rowed barley, or Barley that passes through a 5/64 x 3/4 slotted-hole sieve in accordance with procedures prescribed in AMS's instructions.

(u) *Wild oats*. Seeds of *Avena fatua* L. and *A. sterilis* L.

## **Principles Governing the Application of Standards**

### **§ 810.203 Basis of determination.**

*All other determinations*. Each determination of heat-damaged kernels, injured-by-heat kernels, and white or blue aleurone layers in Six-rowed barley is made on pearled, dockage-free barley. Other determinations not specifically provided for under the General Provisions are made on the basis of the grain when free from dockage, except the determination of odor is made on either the basis of the grain as a whole or the grain when free from dockage.

## Grades and Grade Requirements

### § 810.204 Grades and grade requirements for Six-rowed Malting barley.

SIX-ROWED MALTING BARLEY									
Grade	Minimum Limits of -			Maximum Limits of -					
	Test weight per bushel (pounds)	Suitable malting type (percent)	Sound barley <sup>1</sup> (percent)	Damaged kernels <sup>1</sup> (percent)	Wild oats (percent)	Foreign material (percent)	Other grains (percent)	Skinned and broken kernels (percent)	Thin barley (percent)
U.S. No. 1	47.0	97.0	98.0	2.0	1.0	0.5	2.0	4.0	7.0
U.S. No. 2	45.0	97.0	98.0	3.0	1.0	1.0	3.0	6.0	10.0
U.S. No. 3	43.0	95.0	96.0	4.0	2.0	2.0	5.0	8.0	15.0
U.S. No. 4	43.0	95.0	93.0	5.0	3.0	3.0	5.0	10.0	15.0

<sup>1</sup> Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels or considered against sound barley.

Notes: Malting barley must not be infested in accordance with § 810.107(b) and must not contain any special grades as defined in § 810.206. Six-rowed Malting barley varieties not meeting the requirements of this section must be graded in accordance with standards established for the class barley.

### § 810.205 Grades and grade requirements for Two-rowed Malting barley.

Grade	Minimum Limits of -			Maximum Limits of -					
	Test weight per bushel (pounds)	Suitable malting type (percent)	Sound barley <sup>1</sup> (percent)	Damage Kernels <sup>1</sup> (percent)	Wild Oats (percent)	Foreign material (percent)	Other grains (percent)	Skinned and broken kernels (percent)	Thin barley (percent)
U.S. No. 1	50.0	97.0	98.0	2.0	1.0	0.5	2.0	4.0	5.0
U.S. No. 2	48.0	97.0	98.0	3.0	1.0	1.0	3.0	6.0	7.0
U.S. No. 3	48.0	95.0	96.0	4.0	2.0	2.0	5.0	8.0	10.0
U.S. No. 4	48.0	95.0	93.0	5.0	3.0	3.0	5.0	10.0	10.0

<sup>1</sup> Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels or considered against sound barley.

Notes: Malting barley must not be infested in accordance with §810.107(b) and must not contain any special grades as defined in § 810.206. Two-rowed Malting barley varieties not meet the requirements of this section must be graded in the accordance with standards established for the class Barley.

## § 810.207 Grades and grade requirements for barley.

Grade	Minimum limits of		Maximum limits of				
	Test weight per bushel (pounds)	Sound barley (percent)	Damaged kernels <sup>1</sup> (percent)	Heat damaged kernels (percent)	Foreign material (percent)	Broken kernels (percent)	Thin barley (percent)
U.S. No. 1	47.0	97.0	2.0	0.2	1.0	4.0	10.0
U.S. No. 2	45.0	94.0	4.0	0.3	2.0	8.0	15.0
U.S. No. 3	43.0	90.0	6.0	0.5	3.0	12.0	25.0
U.S. No. 4	40.0	85.0	8.0	1.0	4.0	18.0	35.0
U.S. No. 5	36.0	75.0	10.0	3.0	5.0	28.0	75.0

U.S. Sample Grade:

U.S. Sample grade shall be barley that:

- (a) Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, 4, or 5; or
- (b) Contains 8 or more stones or any number of stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria spp.*), 2 or more castor beans (*Ricinus communis* L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 8 or more cocklebur (*Xanthium spp.*) or similar seeds singly or in combination, 10 or more rodent pellets, bird droppings, or equivalent quantity of other animal filth per 1-1/8 to 1-1/4 quarts of barley; or
- (c) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or
- (d) Is heating or otherwise of distinctly low quality.

<sup>1</sup> Includes heat-damaged kernels. Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels.

### Special Grades and Special Grade Requirements

## § 810.207 Special grades and special grade requirements.

- (a) Blighted barley. Barley that contains more than 4.0 percent of fungus-damaged and/or mold-damaged kernels.
- (b) Ergoty barley. Barley that contains more than 0.10 percent ergot.
- (c) Garlicky barley. Barley that contains three or more green garlic bulblets, or an equivalent quantity of dry or partly dry bulblets in 500 grams of barley.
- (d) Smutty barley. Barley that has kernels covered with smut spores to give a smutty appearance in mass, or which contains more than 0.20 percent smut balls.

# U.S. Standards

February 1992

**Subpart C -- United States Standards for Canola**

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## Terms Defined

### § 810.301 Definition of canola.

Seeds of the genus *Brassica* from which the oil shall contain less than 2 percent erucic acid in its fatty acid profile and the solid component shall contain less than 30.0 micromoles of any one or any mixture of 3-butenyl glucosinolate, 4-pentenyl glucosinolate, 2-hydroxy-3-butenyl, or 2-hydroxy-4-pentenyl glucosinolate, per gram of air-dried, oil free solid. Before the removal of dockage, the seed shall contain not more than 10.0 percent of other grains for which standards have been established under the United States Grain Standards Act.

### § 810.302 Definition of other terms.

(a) *Conspicuous admixture*. All matter other than canola including, but not limited to, ergot, sclerotinia, and stones, which is conspicuous and readily distinguishable from canola and which remains in the sample after the removal of machine separated dockage. Conspicuous admixture is added to machine separated dockage in the computation of total dockage.

(b) *Damaged kernels*. Canola and pieces of canola that are heat-damaged, sproutdamaged, mold-damaged, distinctly green damaged, frost damaged, rimed damaged, or otherwise materially damaged.

(c) *Distinctly green kernels*. Canola and pieces of canola which, after being crushed, exhibit a distinctly green color.

(d) *Dockage*. All matter other than canola that can be removed from the original sample by use of an approved device according to procedures prescribed in FGIS instructions. Also, underdeveloped, shriveled, and small pieces of canola kernels that cannot be recovered by properly rescreening or recleaning. Machine separated dockage is added to conspicuous admixture in the computation of total dockage.

(e) *Ergot*. Sclerotia (sclerotium, sing.) of the fungus, *Claviceps* species, which are associated with some seeds other than canola where the fungal organism has replaced the seed.

(f) *Heat-damaged kernels*. Canola and pieces of canola which, after being crushed, exhibit that they are discolored and damaged by heat.

(g) *Inconspicuous admixture*. Any seed which is difficult to distinguish from canola. This includes, but is not limited to, common wild mustard (*Brassica kaber* and *B. juncea*), domestic brown mustard (*Brassica juncea*), yellow mustard (*B. hirta*), and seed other than the mustard group.

(h) *Sclerotia (sclerotium, sing.)*. Dark colored or black resting bodies of the fungi *Sclerotinia* and *Claviceps*.



(i) *Sclerotinia*. Genus name which includes the fungus *Sclerotinia sclerotiorum* which produces sclerotia. Canola is only infrequently infected, and the sclerotia, unlike sclerotia of ergot, are usually associated within the stem of the plants.

## Principles Governing the Application of Standards

### § 810.303 Basis of determination.

Each determination of conspicuous admixture, ergot, sclerotinia, stones, damaged kernels, heat-damaged kernels, distinctly green kernels, and inconspicuous admixture is made on the basis of the sample when free from dockage. Other determinations not specifically provided for under the general provisions are made on the basis of the sample as a whole, except the determination of odor is made on either the basis of the sample as a whole or the sample when free from dockage. The content of glucosinolates and erucic acid is determined on the basis of the sample according to procedures prescribed in FGIS instructions.

## Grades and Grade Requirements

### § 810.304 Grades and grade requirements for canola.

Grading factors	Grades, U.S. Nos.		
	1	2	3
Damaged kernels:			
Heat damaged	0.1	0.5	2.0
Distinctly green	2.0	6.0	20.0
Total	3.0	10.0	20.0
Conspicuous admixture:			
Ergot	0.05	0.05	0.05
Sclerotinia	0.05	0.10	0.15
Stones	0.05	0.05	0.05
Total	1.0	1.5	2.0
Inconspicuous admixture	5.0	5.0	5.0
Maximum count limits of:			
Other material:			
Animal filth	3	3	3
Glass	0	0	0
Unknown foreign substance	1	1	1
U.S. Sample grade Canola that:			
(a) Does not meet the requirements for U.S. Nos. 1, 2, or 3; or			
(b) Has a musty, sour, or commercially objectionable foreign odor; or			
(c) Is heating or otherwise of distinctly low quality.			

## Special Grades and Special Grade Requirements

### § 810.305 Special grades and special grade requirements.

*Garlicky canola*. Canola that contains more than two green garlic bulblets or an equivalent quantity of dry or partly dry bulblets in approximately a 500 gram portion.

## Nongrade Requirements

### **§ 810.306 Nongrade requirements.**

*Glucosinolates.* Content of glucosinolates in canola is determined according to procedures prescribed in FGIS instructions.

# U.S. Standards

September 1996

**Subpart D -- United States Standards for Corn**

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## Terms Defined

### § 810.401 Definition of corn.

Grain that consists of 50 percent or more of whole kernels of shelled dent corn and/or shelled flint corn (*Zea mays* L.) and not more than 10.0 percent of other grains for which standards have been established under the United States Grain Standards Act.

### § 810.402 Definition of other terms.

(a) *Broken corn*. All matter that passes readily through a 12/64 round-hole sieve and over a 6/64 round-hole sieve according to procedures prescribed in FGIS instructions.

(b) *Broken corn and foreign material*. All matter that passes readily through a 12/64 round-hole sieve and all matter other than corn that remains in the sieved sample after sieving according to procedures prescribed in FGIS instructions.

(c) *Classes*. There are three classes for corn: Yellow corn, White corn, and Mixed corn.

(1) *Yellow corn*. Corn that is yellow-kerneled and contains not more than 5.0 percent of corn of other colors. Yellow kernels of corn with a slight tinge of red are considered Yellow corn.

(2) *White corn*. Corn that is white-kerneled and contains not more than 2.0 percent of corn of other colors. White kernels of corn with a slight tinge of light straw or pink color are considered White corn.

(3) *Mixed corn*. Corn that does not meet the color requirements for either of the classes Yellow corn or White corn and includes white-capped Yellow corn.

(d) *Damaged kernels*. Kernels and pieces of corn kernels that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insectbored, mold-damaged, sprout-damaged, or otherwise materially damaged.

(e) *Foreign material*. All matter that passes readily through a 6/64 round-hole sieve and all matter other than corn that remains on top of the 12/64 round-hole sieve according to procedures prescribed in FGIS instructions.

(f) *Heat-damaged kernels*. Kernels and pieces of corn kernels that are materially discolored and damaged by heat.

(g) *Sieves*.

(1) *12/64 round-hole sieve*. A metal sieve 0.032 inch thick with round perforations 0.1875 (12/64) inch in diameter which are 1/4 inch from center to center. The perforations of each row shall be staggered in relation to the adjacent row.

(2) *6/64 round-hole sieve*. A metal sieve 0.032 inch thick with round perforations 0.0937 (6/64) inch in diameter which are 5/32 inch from center to center. The perforations of each row shall be staggered in relation to the adjacent row.

## Principles Governing the Application of Standards

### § 810.403 Basis of determination.

Each determination of class, damaged kernels, heat-damaged kernels, waxy corn, flint corn, and flint and dent corn is made on the basis of the grain after the removal of the broken corn and foreign material. Other determinations not specifically provided for under the general provisions are made on the basis of the grain as a whole, except the determination of odor is made on either the basis of the grain as a whole or the grain when free from broken corn and foreign material.

### Grades and Grade Requirements

#### § 810.404 Grades and grade requirements for corn.

Grade	Minimum test weight per bushel (pounds)	Maximum limits of:		
		Damaged kernels		Broken corn and foreign material (percent)
		Heat damaged kernels (percent)	Total (percent)	
U.S. No. 1	56.0	0.1	3.0	2.0
U.S. No. 2	54.0	0.2	5.0	3.0
U.S. No. 3	52.0	0.5	7.0	4.0
U.S. No. 4	49.0	1.0	10.0	5.0
U.S. No. 5	46.0	3.0	15.0	7.0
U.S. Sample Grade U.S. Sample grade is corn that: (a) Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, 4, or 5; or (b) Contains stones with an aggregate weight in excess of 0.1 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds ( <i>Crotalaria spp.</i> ), 2 or more castor beans ( <i>Ricinus communis</i> L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 8 or more cockleburrs ( <i>Xanthium spp.</i> ), or similar seeds singly or in combination, or animal filth in excess of 0.20 percent in 1,000 grams; or (c) Has a musty, sour, or commercially objectionable foreign odor; or (d) Is heating or otherwise of distinctly low quality				

### Special Grades and Special Grade Requirements

#### § 810.405 Special grades and special grade requirements.

(a) *Flint corn*. Corn that consists of 95 percent or more of flint corn.

(b) *Flint and dent corn*. Corn that consists of a mixture of flint and dent corn containing more than 5.0 percent but less than 95 percent of flint corn.

(c) *Waxy corn*. Corn that consists of 95 percent or more waxy corn, according to procedures prescribed in FGIS instructions

# U.S. Standards

May 1988

**Subpart F -- United States Standards for Mixed Grain**

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## Terms Defined

### § 810.801 Definition of mixed grain.

Any mixture of grains for which standards have been established under the United States Grain Standards Act, provided that such mixture does not come within the requirements of any of the standards for such grains; and that such mixture consists of 50 percent or more of whole kernels of grain and/or whole or broken soybeans which will not pass through a 5/64 triangular-hole sieve and/or whole flaxseed that passes through such a sieve after sieving according to procedures prescribed in FGIS instructions.

### § 810.802 Definition of other terms.

(a) *Damaged kernels*. Kernels and pieces of grain kernels for which standards have been established under the Act that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

(b) *Foreign material and fines*. All matter other than whole flaxseed that passes through a 5/64 triangular-hole sieve, and all matter other than grains for which standards have been established under the Act, that remains in the sieved sample.

(c) *Grades*. U.S. Mixed Grain, or U.S. Sample grade Mixed Grain, and special grades.

(d) *Heat-damaged kernels*. Kernels and pieces of grain kernels for which standards have been established under the Act, that are materially discolored and damaged by heat.

(e) *Sieve. 5/64 triangular-hole sieve*. A metal sieve 0.032 inch thick with equilateral triangular perforations the inscribed circles of which are 0.0781 (5/64) inch in diameter.

## Principles Governing the Application of Standards

### § 810.803 Basis of determination.

Each determination of damaged and heat-damaged kernels and the percentage of each kind of grain in the mixture is made on the basis of the sample after removal of foreign material and fines. Other determinations not specifically provided for under the general provisions are made on the basis of the grain as a whole, except the determination of odor is made on either the basis of the grain as a whole or the grain when free from foreign material and fines.

## Grades and Grade Requirements

### § 810.804 Grades and grade requirements for mixed grain.

(a) *U.S. Mixed Grain (grade)*. Mixed grain with not more than 15.0 percent of damaged kernels, and not more than 3.0 percent of heat-damaged kernels, and that otherwise does not meet the requirements for the grade U.S. Sample grade Mixed Grain.

(b) *U.S. Sample grade Mixed Grain*. Mixed grain that:

(1) Does not meet the requirements for the grade U.S. Mixed Grain; or

(2) Contains more than 16.0 percent moisture; or

(3) Contains 8 or more stones that have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more *Crotalaria* (*Crotalaria spp.*), 2 or more castor beans (*Ricinus communis* L.), 8 or more cockleburrs (*Xanthium spp.*) or similar seeds singly or in combination, 4 or more pieces of an unknown foreign substance(s) or a recognized harmful or toxic substance(s), 10 or more rodent pellets, bird droppings, or an equivalent quantity of other animal filth per 1,000 grams of mixed grain; or

(4) Is musty, sour, or heating; or

(5) Has any commercially objectionable foreign odor except smut or garlic; or

(6) Is otherwise of distinctly low quality.

## Special Grades and Special Grade Requirements

### § 810.805 Special grades and special grade requirements.

(a) *Blighted mixed grain*. Mixed grain in which barley predominates and that contains more than 4.0 percent of fungus-damaged and/or mold-damaged barley kernels.

(b) *Ergoty mixed grain*.

(1) Mixed grain in which rye or wheat predominates and that contains more than 0.30 percent ergot, or

(2) Any other mixed grain that contains more than 0.10 percent ergot.

(c) *Garlicky mixed grain*.

(1) Mixed grain in which wheat, rye, or triticale predominates, and that contains 2 or more green garlic bulblets, or an equivalent quantity of dry or partly dry bulblets in 1,000 grams of mixed grain; or

(2) Any other mixed grain that contains 4 or more green garlic bulblets, or an equivalent quantity of dry or partly dry bulblets, in 500 grams of mixed grain.



(d) *Smutty mixed grain.*

(1) Mixed grain in which rye, triticale, or wheat predominates, and that contains 15 or more average size smut balls, or an equivalent quantity of smut spores in 250 grams of mixed grain, or

(2) Any other mixed grain that has the kernels covered with smut spores to give a smutty appearance in mass or that contains more than 0.2 percent smut balls.

(e) *Treated mixed grain.* Mixed grain that has been scoured, limed, washed, sulfured, or treated in such a manner that its true quality is not reflected by the grade designation U.S. Mixed Grain or U.S. Sample grade Mixed Grain.

# U.S. Standards

May 1988

**Subpart G -- United States Standards for Oats**

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## Terms Defined

### § 810.1001 Definition of oats.

Grain that consists of 50 percent or more of oats (*Avena sativa* L. and *A. byzantina* C. Koch) and may contain, singly or in combination, not more than 25 percent of wild oats and other grains for which standards have been established under the United States Grain Standards Act.

### § 810.1002 Definition of other terms.

(a) *Fine seeds*. All matter that passes through a 5/64 triangular-hole sieve after sieving according to procedures prescribed in FGIS instructions.

(b) *Foreign material*. All matter other than oats, wild oats, and other grains.

(c) *Heat-damaged kernels*. Kernels and pieces of oat kernels, other grains, and wild oats that are materially discolored and damaged by heat.

(d) *Other grains*. Barley, corn, cultivated buckwheat, einkorn, emmer, flaxseed, guar, hull-less barley, nongrain sorghum, Polish wheat, popcorn, poulard wheat, rice, rye, safflower, sorghum, soybeans, spelt, sunflower seed, sweet corn, triticale, and wheat.

(e) *Sieves*.

(1) *5/64 triangular-hole sieve*. A metal sieve 0.032 inch thick with equilateral triangular perforations the inscribed circles of which are 0.0781 (5/64) inch in diameter.

(2) *0.064 x 3/8 oblong-hole sieve*. A metal sieve 0.032 inch thick with oblong perforations 0.064 inch by 0.375 (3/8) inch.

(f) *Sound oats*. Kernels and pieces of oat kernels (except wild oats) that are not badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

(g) *Wild oats*. Seeds of *Avena fatua* L. and *A. sterilis* L.

## Principles Governing the Application of Standards

### § 810.1003 Basis of determination.

Other determinations not specifically provided for under the general provisions are made on the basis of the grain as a whole.

## Grades and Grade Requirements

### § 810.1004 Grades and grade requirements for oats.

Grade	Minimum limits-		Maximum limits-		
	Test weight per bushel (pounds)	Sound oats (percent)	Heatdamaged kernels (percent)	Foreign material (percent)	Wild oats (percent)
<b>U.S. No. 1</b>	<b>36.0</b>	<b>97.0</b>	<b>0.1</b>	<b>2.0</b>	<b>2.0</b>
<b>U.S. No. 2</b>	<b>33.0</b>	<b>94.0</b>	<b>0.3</b>	<b>3.0</b>	<b>3.0</b>
<b>U.S. No. 3 <sup>1</sup></b>	<b>30.0</b>	<b>90.0</b>	<b>1.0</b>	<b>4.0</b>	<b>5.0</b>
<b>U.S. No. 4 <sup>2</sup></b>	<b>27.0</b>	<b>80.0</b>	<b>3.0</b>	<b>5.0</b>	<b>10.0</b>

U.S. Sample grade--

U.S. Sample grade are oats which:

- (a) Do not meet the requirements for the grades U.S. Nos. 1, 2, 3, or 4; or
- (b) Contain 8 or more stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria spp.*), 2 or more castor beans (*Ricinus communis* L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 8 or more cocklebur (*Xanthium spp.*) or similar seeds singly or in combination, 10 or more rodent pellets, bird droppings, or equivalent quantity of other animal filth per 1-1/8 to 1-1/4 quarts of oats; or
- (c) Have a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or
- (d) Are heating or otherwise of distinctly low quality.

<sup>1</sup> Oats that are slightly weathered shall be graded not higher than U.S. No. 3.

<sup>2</sup> Oats that are badly stained or materially weathered shall be graded not higher than U.S. No. 4.

## Special Grades and Special Grade Requirements

### § 810.1005 Special grades and special grade requirements.

- (a) *Bleached oats*. Oats that in whole or in part, have been treated with sulfurous acid or any other bleaching agent.
- (b) *Bright oats*. Oats, except bleached oats, that are of good natural color.
- (c) *Ergoty oats*. Oats that contain more than 0.10 percent ergot.
- (d) *Extra-heavy oats*. Oats that have a test weight per bushel of 40 pounds or more.
- (e) *Garlicky oats*. Oats that contain 4 or more green garlic bulblets or an equivalent quantity of dry or partly dry bulblets in 500 grams of oats.
- (f) *Heavy oats*. Oats that have a test weight per bushel of 38 pounds or more but less than 40 pounds.
- (g) *Smutty oats*. Oats that have kernels covered with smut spores to give a smutty appearance in mass, or that contain more than 0.2 percent of smut balls.
- (h) *Thin oats*. Oats that contain more than 20.0 percent of oats and other matter, except fine seeds, that pass through a 0.064 x 3/8 oblong-hole sieve but remain on top of a 5/64 triangular-hole sieve after sieving according to procedures prescribed in FGIS instructions.

# U.S. Standards

June 2008

**Subpart I -- United States Standards for Sorghum**

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## Terms Defined

### § 810.1401 Definition of sorghum.

Grain that, before the removal of dockage, consists of 50 percent or more of whole kernels of sorghum (*Sorghum bicolor* (L.) Moench) excluding nongrain sorghum and not more than 10.0 percent of other grains for which standards have been established under the United States Grain Standards Act.

### § 810.1402 Definitions of other terms.

(a) *Broken kernels*. All matter which passes through a 5/64 triangular-hole sieve and over a 2.5/64 round-hole sieve according to procedures prescribed in FGIS instructions.

(b) *Broken kernels and foreign material*. The combination of broken kernels and foreign material as defined in paragraphs (a) and (f) of this section.

(c) *Classes*. There are four classes of sorghum: Sorghum, Tannin sorghum, White sorghum, and Mixed sorghum.

(1) *Sorghum*. Sorghum which lacks a pigmented testa (subcoat) and contains less than 98.0 percent White sorghum and not more than 3.0 percent Tannin sorghum. The pericarp color of this class may appear white, yellow, pink, orange, red, or bronze.\

(2) *Tannin sorghum*. Sorghum which has a pigmented testa (subcoat) and contains not more than 10.0 percent non-Tannin sorghum. The pericarp color of this class is usually brown but may also be white, yellow, pink, orange, red, or bronze.

(3) *White sorghum*. Sorghum which lacks a pigmented testa (subcoat) and contains not more than 2.0 percent sorghum of other classes. The pericarp color of this class is white or translucent and includes sorghum containing spots that, singly or in combination, cover 25.0 percent or less of the kernel.

(4) *Mixed sorghum*. Sorghum which does not meet the requirements for any of the classes Sorghum, Tannin sorghum, or White sorghum.

(d) *Damaged kernels*. Kernels, pieces of sorghum kernels, and other grains that are badly ground damaged, badly weather damaged, diseased, frost-damaged, germ-damaged, heatdamaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

(e) *Dockage*. All matter other than sorghum that can be removed from the original sample by use of an approved device according to procedures prescribed in FGIS instructions. Also, underdeveloped, shriveled, and small pieces of sorghum kernels removed in properly separating the material other than sorghum.

(f) *Foreign material*. All matter, except sorghum, which passes over the number 6 riddle and all matter other than sorghum that remains on the top of the 5/64 triangular-hole sieve according to procedures prescribed in FGIS instructions.

(g) *Heat-damaged kernels*. Kernels, pieces of sorghum kernels, and other grains that are materially discolored and damaged by heat.

(h) *Nongrain sorghum*. Seeds of broomcorn, Johnson-grass, Sorghum alnum Parodi, and sudangrass; and seeds of Sorghum bicolor (L.) Moench that appear atypical of grain sorghum.

(i) *Pericarp*. The pericarp is the outer layers of the sorghum grain and is fused to the seedcoat.

(j) *Sieves*.

(1) *1.98 mm (5/64 (0.0781) inches) triangular-hole sieve*. A metal sieve 0.81 mm (0.032 inches) thick with equilateral triangular perforations the inscribed circles of which are 1.98 mm (0.0781 inches) in diameter.

(2) *0.99 mm (2 1/2/64 (0.0391) inches) round-hole sieve*. A metal sieve 0.81 mm (0.032 inch) thick with round holes 0.99 mm (0.0391 inches) in diameter.

## **Principles Governing the Application of Standards**

### **810.1403 Basis of determination.**

Each determination of broken kernels and foreign material is made on the basis of the grain when free from dockage. Each determination of class, damaged kernels, heatdamaged kernels, and stones is made on the basis of the grain when free from dockage and that portion of the broken kernels, and foreign material that will pass through a 1.98 mm (5/64 inch) triangular-hole sieve. Other determinations not specifically provided for in the general provisions are made on the basis of the grain as a whole except the determination of odor is made on either the basis of the grain as a whole or the grain when free from dockage, broken kernels, and foreign material removed by the 1.98 mm (5/64 inch) triangular-hole sieve.



## Sorghum Grades and Grade Requirements

### § 810.1404 - Grades and grade requirements for sorghum.

Grading factors	Grades U.S. Nos. <sup>1</sup>			
	1	2	3	4
Minimum pound limits of				
Test weight per bushel:	57.0	55.0	53.0	51.0
Maximum percent limits of				
Damaged kernels:				
Heat (part of total)	0.2	0.5	1.0	3.0
Total	2.0	5.0	10.0	15.0
Broken kernels and foreign material:				
Foreign material (part of total)	1.0	2.0	3.0	4.0
Total	3.0	6.0	8.0	10.0
Maximum count limits of				
Other material:				
Animal filth	9	9	9	9
Castor beans	1	1	1	1
Crotalaria seeds	2	2	2	2
Glass	1	1	1	1
Stones <sup>2</sup>	7	7	7	7
Unknown foreign substance	3	3	3	3
Cockleburrs	7	7	7	7
Total <sup>3</sup>	10	10	10	10
<p>U.S. Sample grade is sorghum that:</p> <p>(a) Does not meet the requirements for U.S. Nos. 1, 2, 3, or 4; or</p> <p>(b) Has a musty, sour or commercially objectionable foreign odor (except smut odor); or</p> <p>(c) Is badly weathered, heating or distinctly low quality.</p> <p><sup>1</sup> Sorghum which is distinctly discolored shall not grade higher than U.S. No. 3.</p> <p><sup>2</sup> Aggregate weight of stones must also exceed 0.2 percent of the sample weight.</p> <p><sup>3</sup> Includes any combination of animal filth, castor beans, crotalaria seeds, glass, stones, unknown foreign substances or cockleburrs.</p>				

## Special Grades and Special Grade Requirements

### § 810.1405 Special grades and special grade requirements.

*Smutty sorghum.* Sorghum that has kernels covered with smut spores to give a smutty appearance in mass, or that contains 20 or more smut balls in 100 grams of sorghum.

# U.S. Standards

September 2007

**Subpart J -- United States Standards for Soybeans**

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## Terms Defined

### § 810.1601 Definition of soybeans.

Grain that consists of 50 percent or more of whole or broken soybeans (*Glycine max* (L.) Merr.) that will not pass through an 8/64 round-hole sieve and not more than 10.0 percent of other grains for which standards have been established under the United States Grain Standards Act.

### § 810.1602 Definition of other terms.

(a) *Classes*. There are two classes of soybeans: Yellow soybeans and Mixed soybeans.

(1) *Yellow soybeans*. Soybeans that have yellow or green seed coats and which in cross section, are yellow or have a yellow tinge, and may include not more than 10.0 percent of soybeans of other colors.

(2) *Mixed soybeans*. Soybeans that do not meet the requirements of the class Yellow soybeans.

(b) *Damaged kernels*. Soybeans and pieces of soybeans that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insectbored, mold-damaged, sprout-damaged, stinkbug-stung, or otherwise materially damaged. Stinkbug-stung kernels are considered damaged kernels at the rate of one-fourth of the actual percentage of the stung kernels.

(c) *Foreign material*. All matter that passes through an 8/64 round-hole sieve and all matter other than soybeans remaining in the sieved sample after sieving according to procedures prescribed in FGIS instructions.

(d) *Heat-damaged kernels*. Soybeans and pieces of soybeans that are materially discolored and damaged by heat.

(e) *Purple mottled or stained*. Soybeans that are discolored by the growth of a fungus; or by dirt; or by a dirt-like substance(s) including nontoxic inoculants; or by other nontoxic substances.

(f) *Sieve. 8/64 round-hole sieve*. A metal sieve 0.032 inch thick perforated with round holes 0.125 (8/64) inch in diameter.

(g) *Soybeans of other colors*. Soybeans that have green, black, brown, or bicolored seed coats. Soybeans that have green seed coats will also be green in cross section. Bicolored soybeans will have seed coats of two colors, one of which is brown or black, and the brown or black color covers 50 percent of the seed coats. The hilum of a soybean is not considered a part of the seed coat for this determination.

(h) *Splits*. Soybeans with more than one-fourth of the bean removed and that are not damaged.

## Principles Governing the Application of Standards

### § 810.1603 Basis of determination.

Each determination of class, heat-damaged kernels, damaged kernels, splits, and soybeans of other colors is made on the basis of the grain when free from foreign material. Other determinations not specifically provided for under the general provisions are made on the basis of the grain as a whole.

### Grades, Grade Requirements, and Grade Designations

### § 810.1604 Grades and grade requirements for soybeans

Grading factors	Grades U. S. Nos.			
	1	2	3	4
<b>Maximum percent limits of</b>				
<b>Damaged kernels:</b>				
Heat (part of total)	0.2	0.5	1.0	3.0
Total	2.0	3.0	5.0	8.0
Foreign material	1.0	2.0	3.0	5.0
Splits	10.0	20.0	30.0	40.0
Soybeans of other colors <sup>1</sup>	1.0	2.0	5.0	10.0
<b>Maximum count limits of</b>				
<b>Other materials:</b>				
Animal filth	9	9	9	9
Castor beans	1	1	1	1
Crotalaria seeds	2	2	2	2
Glass	0	0	0	0
Stones <sup>2</sup>	3	3	3	3
Unknown foreign substance	3	3	3	3
Total <sup>3</sup>	10	10	10	10
<p>U.S. Sample grade are soybeans that:</p> <p>(a) Do not meet the requirements for U.S. Nos. 1, 2, 3, or 4; or</p> <p>(b) Have a musty, sour, or commercially objectionable foreign odor (except garlic odor); or</p> <p>(c) Are heating or otherwise of distinctly low quality.</p> <p><sup>1</sup> Disregard for Mixed soybeans.</p> <p><sup>2</sup> In addition to the maximum count limit, stones must exceed 0.1 percent of the sample weight.</p> <p><sup>3</sup> Includes any combination of animal filth, castor beans, crotalaria seeds, glass, stones, and unknown foreign substances. The weight of stones is not applicable for total other material.</p>				

## Special Grades and Special Grade Requirements

### § 810.1605 Special grades and special grade requirements.

(a) *Garlicky soybeans*. Soybeans that contain five or more green garlic bulblets or an equivalent quantity of dry or partly dry bulblets in a 1,000-gram portion.

(b) *Purple mottled or stained*. Soybeans with pink or purple seed coats as determined on a portion of approximately 400 grams with the use of an FGIS Interpretive Line Photograph.

# U.S. Standards

May 2014

**Subpart M -- United States Standards for Wheat**

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## Terms Defined

### § 810.2201 Definition of wheat.

Grain that, before the removal of dockage, consists of 50 percent or more common wheat (*Triticum aestivum* L.), club wheat (*T. compactum* Host.), and durum wheat (*T. durum* Desf.) and not more than 10 percent of other grains for which standards have been established under the United States Grain Standards Act and that, after the removal of the dockage, contains 50 percent or more of whole kernels of one or more of these wheats.

### § 810.2202 Definition of other terms.

(a) *Classes*. There are eight classes for wheat: Durum wheat, Hard Red Spring wheat, Hard Red Winter wheat, Soft Red Winter wheat, Hard White wheat, Soft White wheat, Unclassed wheat, and Mixed wheat.

(1) *Durum wheat*. All varieties of white (amber) durum wheat. This class is divided into the following three subclasses:

(i) *Hard Amber Durum wheat*. Durum wheat with 75 percent or more of hard and vitreous kernels of amber color.

(ii) *Amber Durum wheat*. Durum wheat with 60 percent or more but less than 75 percent of hard and vitreous kernels of amber color.

(iii) *Durum wheat*. Durum wheat with less than 60 percent of hard and vitreous kernels of amber color.

(2) *Hard Red Spring wheat*. All varieties of Hard Red Spring wheat. This class shall be divided into the following three subclasses:

(i) *Dark Northern Spring wheat*. Hard Red Spring wheat with 75 percent or more of dark, hard, and vitreous kernels.

(ii) *Northern Spring wheat*. Hard Red Spring wheat with 25 percent or more but less than 75 percent of dark, hard, and vitreous kernels.

(iii) *Red Spring wheat*. Hard Red Spring wheat with less than 25 percent of dark, hard, and vitreous kernels.

(3) *Hard Red Winter wheat*. All varieties of Hard Red Winter wheat. There are no subclasses in this class.

(4) *Soft Red Winter wheat*. All varieties of Soft Red Winter wheat. There are no subclasses in this class.

(5) *Hard White wheat*. All hard endosperm white wheat varieties. There are no subclasses in this class.

(6) *Soft White wheat*. All soft endosperm white wheat varieties. This class is divided into the following three subclasses:

(i) *Soft White wheat*. Soft endosperm white wheat varieties which contain not more than 10 percent of white club wheat.

(ii) *White Club wheat*. Soft endosperm white club wheat varieties containing not more than 10 percent of other soft white wheats.

(iii) *Western White wheat*. Soft White wheat containing more than 10 percent of white club wheat and more than 10 percent of other soft white wheats.

(7) *Unclassed wheat*. Any variety of wheat that is not classifiable under other criteria provided in the wheat standards. There are no subclasses in this class. This class includes any wheat which is other than red or white in color.

(8) *Mixed wheat*. Any mixture of wheat that consists of less than 90 percent of one class and more than 10 percent of one other class, or a combination of classes that meet the definition of wheat.

(b) *Contrasting classes*. Contrasting classes are:

(1) Durum wheat, Soft White wheat, and Unclassed wheat in the classes Hard Red Spring wheat and Hard Red Winter wheat.

(2) Hard Red Spring wheat, Hard Red Winter wheat, Hard White wheat, Soft Red Winter wheat, Soft White wheat, and Unclassed wheat in the class Durum wheat.

(3) Durum wheat and Unclassed wheat in the class Soft Red Winter wheat.

(4) Durum wheat, Hard Red Spring wheat, Hard Red Winter wheat, Soft Red Winter wheat, and Unclassed wheat in the class Soft White wheat.

(5) Durum wheat, Soft Red Winter wheat, and Unclassed wheat, in the class Hard White wheat.

(c) *Damaged kernels*. Kernels, pieces of wheat kernels, and other grains that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

(d) *Defects*. Damaged kernels, foreign material, and shrunken and broken kernels. The sum of these three factors may not exceed the limit for the factor defects for each numerical grade.



(e) *Dockage*. All matter other than wheat that can be removed from the original sample by use of an approved device according to procedures prescribed in FGIS instructions. Also, underdeveloped, shriveled, and small pieces of wheat kernels removed in properly separating the material other than wheat and that cannot be recovered by properly rescreening or recleaning.

(f) *Foreign material*. All matter other than wheat that remains in the sample after the removal of dockage and shrunken and broken kernels.

(g) *Heat-damaged kernels*. Kernels, pieces of wheat kernels, and other grains that are materially discolored and damaged by heat which remain in the sample after the removal of dockage and shrunken and broken kernels.

(h) *Other grains*. Barley, corn, cultivated buckwheat, einkorn, emmer, flaxseed, guar, hull-less barley, nongrain sorghum, oats, Polish wheat, popcorn, poulard wheat, rice, rye, safflower, sorghum, soybeans, spelt, sunflower seed, sweet corn, triticale, and wild oats.

(i) *Shrunken and broken kernels*. All matter that passes through a 0.064 x 3/8 oblong-hole sieve after sieving according to procedures prescribed in the FGIS instructions.

(j) *Sieve*. 0.064 x 3/8 oblong-hole sieve. A metal sieve 0.032 inch thick with oblong perforations 0.064 inch by 0.375 (3/8) inch.

## **Principles Governing the Application of Standards**

### **§ 810.2203 Basis of determination.**

Each determination of heat-damaged kernels, damaged kernels, foreign material, wheat of other classes, contrasting classes, and subclasses is made on the basis of the grain when free from dockage and shrunken and broken kernels. Other determinations not specifically provided for under the general provisions are made on the basis of the grain when free from dockage, except the determination of odor is made on either the basis of the grain as a whole or the grain when free from dockage.

## Grades and Grade Requirements

### § 810.2204 Grades and grade requirements for wheat.

(a) Grades and grade requirements for all classes of wheat, except Mixed wheat.

Grading factors	Grades U.S. Nos.				
	1	2	3	4	5
<b>Minimum pound limits of:</b>					
<b>Test weight per bushel</b>					
<b>Hard Red Spring wheat or White Club wheat</b>	<b>58.0</b>	<b>57.0</b>	<b>55.0</b>	<b>53.0</b>	<b>50.0</b>
<b>All other classes and subclasses</b>	<b>60.0</b>	<b>58.0</b>	<b>56.0</b>	<b>54.0</b>	<b>51.0</b>
<b>Maximum percent limits of:</b>					
<b>Defects:</b>					
<b>Damaged kernels</b>					
Heat (part of total)	<b>0.2</b>	<b>0.2</b>	<b>0.5</b>	<b>1.0</b>	<b>3.0</b>
Total	<b>2.0</b>	<b>4.0</b>	<b>7.0</b>	<b>10.0</b>	<b>15.0</b>
<b>Foreign material</b>	<b>0.4</b>	<b>0.7</b>	<b>1.3</b>	<b>3.0</b>	<b>5.0</b>
<b>Shrunken and broken kernels</b>	<b>3.0</b>	<b>5.0</b>	<b>8.0</b>	<b>12.0</b>	<b>20.0</b>
Total <sup>1</sup>	<b>3.0</b>	<b>5.0</b>	<b>8.0</b>	<b>12.0</b>	<b>20.0</b>
<b>Wheat of other classes: <sup>2</sup></b>					
Contrasting classes	<b>1.0</b>	<b>2.0</b>	<b>3.0</b>	<b>10.0</b>	<b>10.0</b>
Total <sup>3</sup>	<b>3.0</b>	<b>5.0</b>	<b>10.0</b>	<b>10.0</b>	<b>10.0</b>
<b>Stones</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>Maximum count limits of:</b>					
<b>Other material in one kilogram:</b>					
<b>Animal filth</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Castor beans</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Crotalaria seeds</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>Glass</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Stones</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>Unknown foreign substances</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Total <sup>4</sup>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
<b>Insect-damaged kernels in 100 grams</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>
U.S. Sample grade is Wheat that: (a) Does not meet the requirements for U.S. Nos. 1, 2, 3, 4, or 5; or (b) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor) or (c) Is heating or of distinctly low quality.  <sup>1</sup> Includes damaged kernels (total), foreign material, shrunken and broken kernels. <sup>2</sup> Unclassed wheat of any grade may contain not more than 10.0 percent of wheat of other classes. <sup>3</sup> Includes contrasting classes. <sup>4</sup> Includes any combination of animal filth, castor beans, crotalaria seeds, glass, stones, or unknown foreign substance.					

(b) Grades and grade requirements for Mixed wheat. Mixed wheat is graded according to the U.S. numerical and U.S. Sample grade requirements of the class of wheat that predominates in the mixture, except that the factor wheat of other classes is disregarded.

## Special Grades and Special Grade Requirements

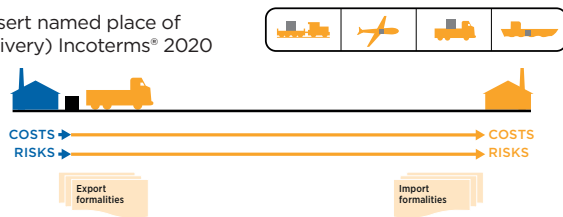
### § 810.2205 Special grades and special grade requirements.

- (a) *Ergoty wheat*. Wheat that contains more than 0.05 percent of ergot.
- (b) *Garlicky wheat*. Wheat that contains in a 1,000 gram portion more than two green garlic bulblets or an equivalent quantity of dry or partly dry bulblets.
- (c) *Light smutty wheat*. Wheat that has an unmistakable odor of smut, or which contains, in a 250-gram portion, smut balls, portions of smut balls, or spores of smut in excess of a quantity equal to 5 smut balls, but not in excess of a quantity equal to 30 smut balls of average size.
- (d) *Smutty wheat*. Wheat that contains, in a 250-gram portion, smut balls, portions of smut balls, or spores of smut in excess of a quantity equal to 30 smut balls of average size.
- (e) *Treated wheat*. Wheat that has been scoured, limed, washed, sulfured, or treated in such a manner that the true quality is not reflected by either the numerical grades or the U.S. Sample grade designation alone.

### RULES FOR ANY MODE OR MODES OF TRANSPORT

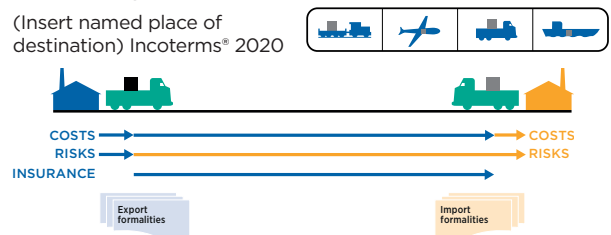
#### EXW Ex Works

(Insert named place of delivery) Incoterms<sup>®</sup> 2020



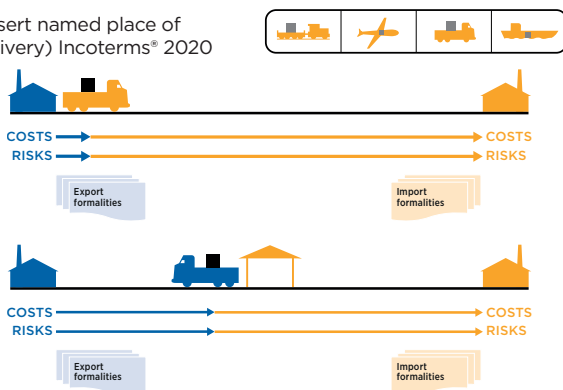
#### CIP Carriage and Insurance Paid To

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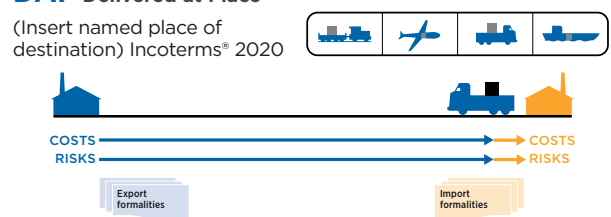
#### FCA Free Carrier

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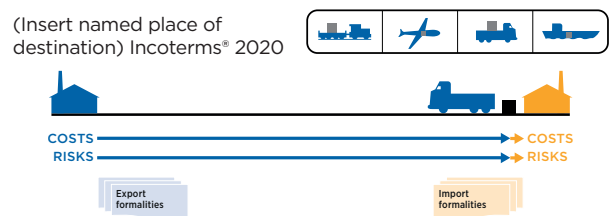
#### DAP Delivered at Place

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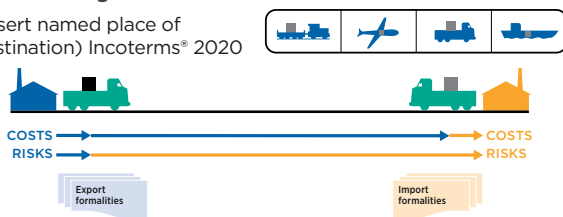
#### DPU Delivered at Place Unloaded

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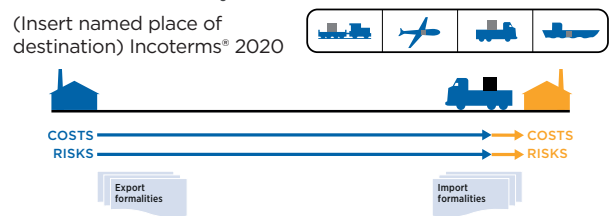
#### CPT Carriage Paid To

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#### DDP Delivered Duty Paid

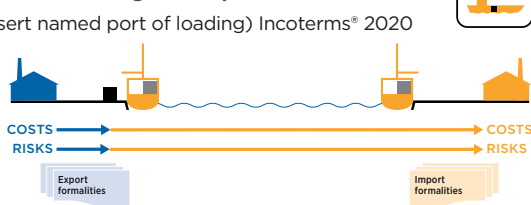
(Insert named place of destination) Incoterms<sup>®</sup> 2020



### RULES FOR SEA AND INLAND WATERWAY TRANSPORT

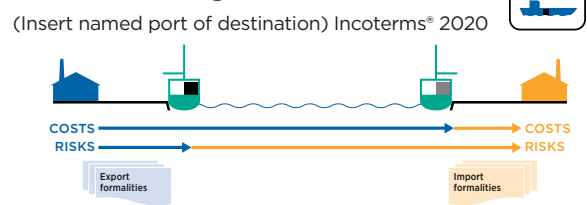
#### FAS Free Alongside Ship

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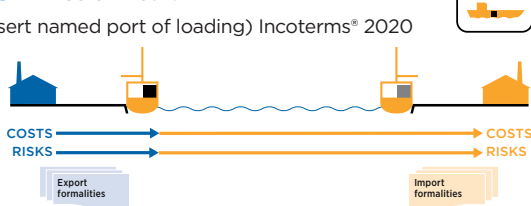
#### CFR Cost and Freight

(Insert named port of destination) Incoterms<sup>®</sup> 2020



#### FOB Free on Board

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#### CIF Cost, Insurance and Freight

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