

Ethanol Market and Pricing Data



March 24, 2020

Reports available at https://grains.org/ethanol_report/.

CONTENTS

| Ethanol, Fuels and Co-Product Pricing | 2 |
|---------------------------------------|----|
| Tariff Rates | 10 |
| Additional Market Resources | 11 |

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The U.S. Grains Council is a private, non-profit partnership of producers and agribusinesses committed to building and expanding international markets for U.S. barley, corn, grain sorghum and their products. The Council is headquartered in Washington, D.C. and has ten international offices that oversee programs in more than 50 countries. Financial support from our private industry members, including state checkoffs, agribusinesses, state entities and others, triggers federal matching funds from the USDA resulting in a combined program value of more than \$26 million.

| Comparative Pricing for Fuels and Co-Products - \$/Gallon | | | | | |
|---|------------------|--------------------------|------------------|---------------------------------|---------------------------------|
| Product | Current price | Prior week average | Previous year | % change (week over week) | % change (year over year) |
| | Ethar | nol | | | |
| Ethanol (FOB Gulf) | \$0.952 | \$1.128 | \$1.503 | -15.7% | -36.7% |
| Anhydrous Ethanol (FOB Santos, Brazil) | \$1.531 | \$1.646 | \$1.984 | -7.0% | -22.8% |
| Hydrous Ethanol (FOB Santos, Brazil) | \$1.344 | \$1.503 | \$1.945 | -10.6% | -30.9% |
| Anhydrous - Hydrous Spread | \$0.187 | \$0.143 | \$0.039 | 30.5% | 380.3% |
| Gulf discount/premium from Santos | -\$0.579 | -\$0.518 | -\$0.480 | 11.9% | 20.6% |
| Ethanol (FOB PNW) | \$1.040 | \$1.235 | \$1.642 | -15.8% | -36.6% |
| | | | | | |
| MTBE (FOB Gulf) | \$0.799 | \$1.092 | \$1.953 | -26.9% | -59.1% |
| MTBE Premium/Discount to Ethanol (FOB Gulf) | -\$0.153 | -\$0.036 | \$0.450 | -11.2% | -22.4% |
| | | | | | |
| Benzene (FOB U.S. Gulf) | \$1.256 | \$1.834 | \$2.221 | -31.5% | -43.5% |
| Toluene NITN (FOB U.S. Gulf) | \$1.144 | \$1.458 | \$2.514 | -21.6% | -54.5% |
| Mixed Xylene (FOB U.S. Gulf) | \$1.126 | \$1.476 | \$2.685 | -23.7% | -58.1% |
| Weighted Average Aromatic Price (BTX) | \$1.147 | \$1.515 | \$2.578 | -24.3% | -55.5% |
| Gasoline (FOB Gulf) | \$0.545 | \$0.929 | \$1.818 | -41.4% | -70.0% |
| Source: World Perspectives Inc | | | | | |

Source: World Perspectives, Inc.

| Comparative Pricing for Fuels and Co-Products - \$/Liter | | | | | |
|--|---------------|--------------------------|------------------|---------------------------------|---------------------------------|
| Product | Current price | Prior week average | Previous year | % change (week over week) | % change (year over year) |
| Ethanol | | | | | |
| Ethanol (FOB Gulf) | \$0.251 | \$0.298 | \$0.397 | -15.7% | -36.7% |
| Anhydrous Ethanol (FOB Santos, Brazil) | \$0.404 | \$0.435 | \$0.524 | -7.0% | -22.8% |
| Hydrous Ethanol (FOB Santos, Brazil) | \$0.355 | \$0.397 | \$0.514 | -10.6% | -30.9% |
| Anhydrous - Hydrous Spread | \$0.049 | \$0.038 | \$0.010 | 30.5% | 380.3% |
| Gulf discount/premium from Santos | -\$0.153 | -\$0.137 | -\$0.127 | 11.9% | 20.6% |
| Ethanol (FOB PNW) | \$0.275 | \$0.326 | \$0.434 | -15.8% | -36.6% |
| | | | | | |
| MTBE (FOB Gulf) | \$0.211 | \$0.289 | \$0.516 | -26.9% | -59.1% |
| MTBE Premium/Discount to Ethanol (FOB Gulf) | -\$0.040 | -\$0.010 | \$0.119 | -11.2% | -22.4% |
| "Aromatic" Octane Enhancers (BTX) | | | | | |
| Benzene (FOB U.S. Gulf) | \$0.332 | \$0.485 | \$0.587 | -31.5% | -43.5% |
| Toluene NITN (FOB U.S. Gulf) | \$0.302 | \$0.385 | \$0.664 | -21.6% | -54.5% |
| Mixed Xylene (FOB U.S. Gulf) | \$0.297 | \$0.390 | \$0.709 | -23.7% | -58.1% |
| Weighted Average Aromatic Price (BTX) | \$0.303 | \$0.400 | \$0.681 | -24.3% | -55.5% |
| Gasoline (FOB Gulf) | \$0.144 | \$0.245 | \$0.480 | -41.4% | -70.0% |

Source: World Perspectives, Inc.

Market Outlook: U.S. ethanol prices ended last week 6 percent lower and are extending those losses in early week trading, down 8.2 percent through Tuesday's close. Midwest wholesale rack ethanol prices were lower to end last week and are down 3.2 percent through Tuesday's market close to their last quote of 32.49 cents/liter (122.99 cents/gallon).

FOB Houston ethanol prices finished last week 15 percent lower and are down 15.7 percent through Tuesday's trading from Friday's close. FOB Houston ethanol prices are quoted at 25.14 cents/liter (95.18 cents/gallon). FOB Santos, Brazil anhydrous ethanol prices were lower last week; they are down in early week trading, falling 7 percent to 40.44 cents/liter (153.1 cents/gallon) through Tuesday's trading.

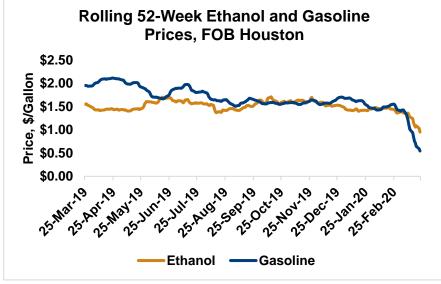
The FOB Gulf-Santos, Brazil ethanol spread has widened from last week's close through Tuesday's trading and is currently at -15.3 cents/liter (57.92 cents/gallon).

MTBE prices fell 29 percent last week and have posted further losses in early week trading, down 23.1 percent from Friday's close through Tuesday's trading. MTBE's premium to FOB Houston ethanol has decreased from last week's report and stands at -2.97 cents/liter (-11.24 cents/gallon).

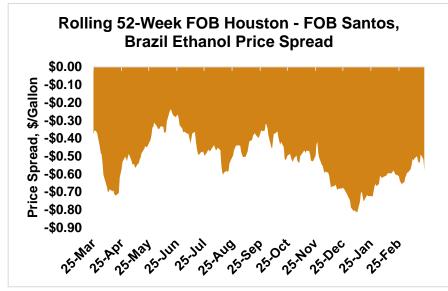
BTX component prices were sharply lower last week and are continuing that trend through Tuesday's market close: Benzene is down 27.8 percent while Toluene is down 18.9 percent, and Xylene is down 20.3 percent. The estimated weighted average aromatic price is currently 31.62 cents/liter (119.69 cents/gallon), down from last Friday's close. The BTX-Houston ethanol spread narrowed last week, and

the weighted average BTX price is 6.48 cents/liter (24.51 cents/gallon) higher than the FOB Houston ethanol price.

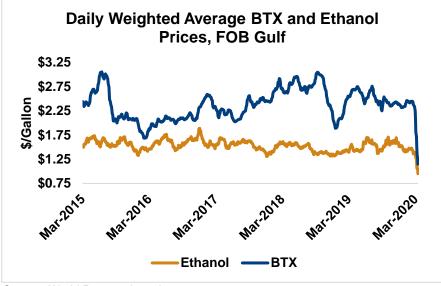
Gasoline and petroleum products were lower last week and have mostly continued that trend in early week trading. RBOB futures are down 26.7 percent to start the week while 84 octane RBOB (Houston) and 87 octane CBOB (U.S. Gulf) gasoline prices are down 23.2 and 28 percent, respectively. WTI futures are 6.1 percent higher at \$24.01/barrel while Brent futures are up 4.4 percent to \$30.27/barrel, from Friday through Tuesday's close.



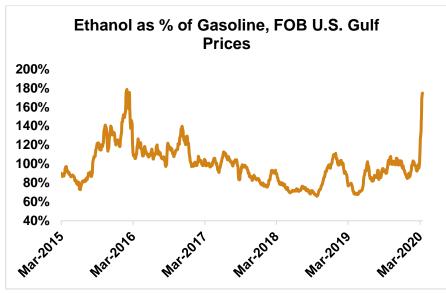
Source: World Perspectives, Inc.



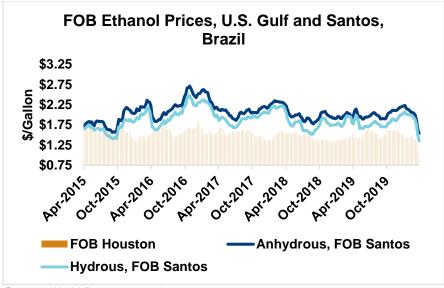
Source: World Perspectives, Inc.



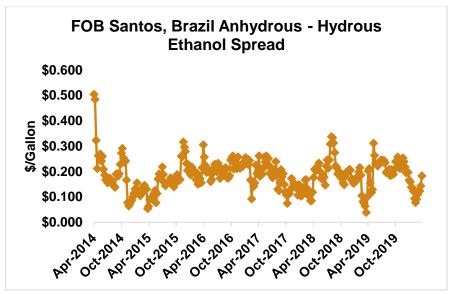
Source: World Perspectives, Inc.



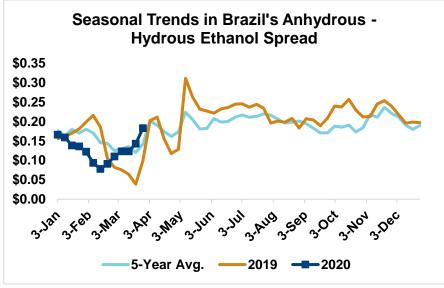
Source: World Perspectives, Inc.



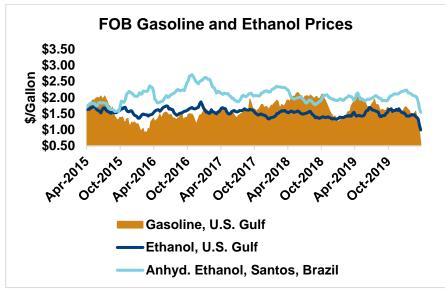
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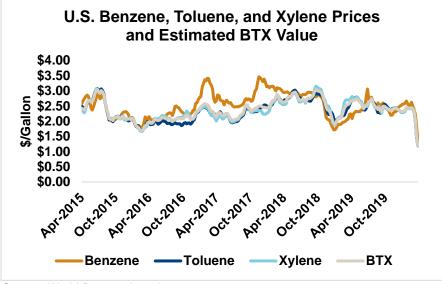
Source: World Perspectives, Inc.



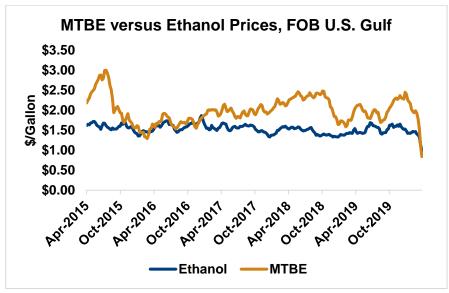
Source: World Perspectives, Inc



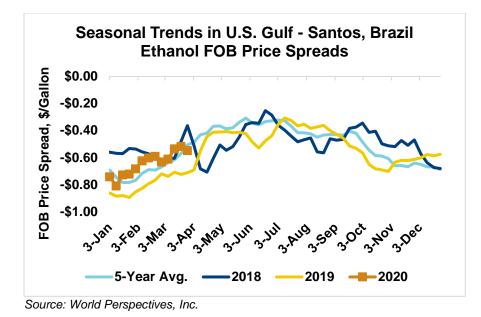
Source: World Perspectives, Inc



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Price Database: If you are interested in historical price data, please click here.

Tariff Rates

| HS Codes | | | | | |
|------------|---|--|--|--|--|
| HS Code | Description | | | | |
| 2207106010 | Ethyl alcohol, <i>undenatured</i> , of an alcoholic strength by volume of 80 percent or higher, for fuel use. | | | | |
| 2207200010 | Ethyl alcohol and other spirits, <i>denatured</i> , of any strength, for fuel use. | | | | |

| Global Tariff Rates on U.S. Ethanol | | | | | | | |
|-------------------------------------|-------------|----------|---------|---|---|--|--|
| Country | HS Code | Unit of | Rates | of Duty | Notes | | |
| Country | | Quantity | General | Special | | | |
| Canada | Undenatured | \$/liter | 0% | - | NAFTA | | |
| Canada | Denatured | \$/liter | 0% | - | | | |
| Brazil | Undenatured | \$/liter | 20% | TRQ at 600 mln.liters on an annual basis at 20% | Ethanol included in Brazil's list of exceptions; zero percent tariff on | | |
| | Denatured | \$/liter | 20% | tariff above the allowance. | ethanol through December 31, 2021 per Resolution #92 (MDIC/CAMEX) | | |
| China | Undenatured | \$/liter | 65% | VAT on imports of | VAT on both denatured and | | |
| China | Denatured | \$/liter | 70% | 13%. | undenatured is 13% as of April 1, 2019 | | |
| India | Undenatured | \$/liter | 150% | - | Ethyl alcohol supplied to Oil Marketing Companies for blending with motor | | |
| Inula | Denatured | \$/liter | 2.50% | Basic customs duty applicable. | gasoline will attract a 5% G&S tax. | | |
| Philippines | Undenatured | \$/liter | 0% | 1% | 1% additional duty imposed if imported ethanol is to be used for fuel-blending | | |
| rimppines | Denatured | \$/liter | 0% | 1% | purposes under Philippine Fuel Ethanol Program. | | |
| Peru | Undenatured | \$/liter | 0% | VAT on imports of | U.SPeru Trade Promotion Agreement Iowered U.S. import duties to 3% | | |
| reiu | Denatured | \$/liter | 0% | 18% | (denatured) and 0% (undenatured). Denatured duty down to 0% in 2018. | | |
| Korea, South | Undenatured | \$/liter | 20% | VAT on imports of | KORUS | | |
| Norea, South | Denatured | \$/liter | 103% | 10% | Kokoo | | |
| Mexico | Undenatured | \$/liter | 16% | - | NAFTA | | |
| MEXICO | Denatured | \$/liter | 0% | - | 1979 173 | | |
| Nigeria | Undenatured | \$/liter | 70% | - | | | |
| Nigena | Denatured | \$/liter | 15% | - | | | |
| United Arab Emirates | Undenatured | \$/liter | 5% | - | GCC common external tariff. | | |
| | Denatured | \$/liter | 5% | - | GGG common externar tallit. | | |
| Vietnam | Undenatured | \$/liter | 20% | | 17 percent tariffs for 99 percent or less pure ethanol | | |
| Vietnam | Denatured | \$/liter | 20% | | 20 percent tariffs for 100 percent pure ethanol | | |

Tariff Rate Database: If you are interested in tariff rate data for all U.S. export markets, please click <u>here</u>.

Additional Market Resources

| USDA GAIN Reports | | |
|---|--|------------|
| Title | Description | Link |
| Argentina Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in Argentina. | Read here. |
| Australia Biofuels Annual 2018 (GAIN) | This report provides an overview on biofuel use in Australia. | Read here. |
| Brazil Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in Brazil. | Read here. |
| Canada Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in Canada. | Read here. |
| China Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in China. | Read here. |
| Colombia Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in Colombia. | Read here. |
| Ethanol Industry Emerging in Ecuador (GAIN) | This report highlights Ecuador's emerging ethanol industry. | Read here. |
| EU-28 Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in the EU-28. | Read here. |
| EU-28: Biofuel Mandates in the EU by Member State in 2019 (GAIN) | This report provides an overview on the biofuel use mandates in the EU member states and supplements the EU-28 Biofuels Annual Report. | Read here. |
| India Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in India. | Read here. |
| Indonesia Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in Indonesia. | Read here. |
| Japan Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in Japan. | Read here. |
| Malaysia Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in Malaysia. | Read here. |
| Peru Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in Peru. | Read here. |
| Philippines Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in the Philippines. | Read here. |
| Romania Biofuels Market Overview 2017 (GAIN) | This report provides an overview on biofuel use in Romania. | Read here. |
| Thailand Biofuels Annual 2019 (GAIN) | This report provides an overview on biofuel use in Thailand. | Read here. |