

# **Cash-Settled Hydrous Ethanol Futures Contract**

# - Specifications -

# 1. Definitions

1.	Deminions	
	Contract (specifications):	The terms and rules under which the transactions shall be executed and settled.
	Settlement price (PA):	The closing price, for the purpose of updating the value of open positions and calculating the variation margin and the settlement value of day trades, calculated and/or arbitrated daily by BM&FBOVESPA, at its own discretion, for each
		authorized delivery month, and expressed in Brazilian Reals per cubic meter of
		hydrous ethanol.
		The exchange rate of Brazilian Reals per United States Dollar described in
	rate benchmark:	Attachment III of Circular Letter 058/2002-DG, of April 19, 2002.
	<u>PTAX</u> :	The exchange rate of Brazilian Reals (R\$) per U.S. Dollar for cash delivery, pu-
		blished by the Central Bank of Brazil (BACEN) through SISBACEN, transaction
		PTAX800, option "5," closing offered quotation, for settlement in two days, utili-
		zing the maximum of seven decimal places, corresponding to the last day of the
		month preceding the delivery month.
	Business day:	Any day that is a trading day at BM&FBOVESPA.
2	Underlying commodity	

# 2. Underlying commodity

Hydrous fuel ethanol, in accordance with the technical specifications defined by the National Petroleum Agency (ANP).

# 3. Price quotation

Brazilian Reals per cubic meter (1,000 liters) of hydrous ethanol, as defined in item 2, to two decimal places, free of Tax on the Circulation of Merchandise and Services (ICMS), Social Integration Program (PIS) tax and Social Security Financing (COFINS) tax.

#### **4. Minimum price fluctuation** BRL0.50 (fifty Brazilian Real cents) per cubic meter.

5. Maximum daily price fluctuation

As established by BM&FBOVESPA.

The price fluctuation limit for the first month shall be suspended on the last three days of trading. The Exchange may alter the price fluctuation limit applicable to any contract month at any time, even during a trading session, by communicating this to the market with a 30 minute-advance notice.

# 6. Contract size

30 cubic meters (30,000 liters).

- 7. Delivery months All months.
- **8.** Number of authorized delivery months As authorized by BM&FBOVESPA.
- **9. Expiration date and last trading day** The last business day of the delivery month.

# 10. Business day

For the purposes of this contract, a trading day at BM&FBOVESPA shall be considered a business day. For the purposes of the payment and receipt of amounts, as referred to in <u>items 11</u>, <u>12</u>, <u>13.1</u> and <u>18.2</u>, a day that is not a banking holiday in New York, USA, and is a trading day at BM&FBOVESPA shall be considered a business day.

# 11. Day trading

Buying and selling on the same trading session the same number of contracts for the same month shall be offset provided these transactions are executed on behalf of the same customer through the same Brokerage House and registered by the same Clearing member, or performed by the same Local and registered by the same Clearing Member. These transactions shall be cash settled on the following business day, and their amounts shall be calculated in accordance with <u>item 12(a)</u>, in observance of the provisions set forth in <u>item 19</u>, where applicable.

# 12. Daily settlement of accounts (variation margin)

The positions outstanding at the end of each session shall be marked-to-market according to that day's settlement price, as determined by BM&FBOVESPA rules and regulations. The corresponding amount shall be cash settled on the following business day, in observance of the provisions set forth in <u>item 19</u>, where applicable.



The variation margin shall be calculated up to the last trading day by the following formulas:

a) For the positions initiated on the day

$$AD_t = (PA_t - PO) \times 30 \times n \tag{1}$$

b) For the positions outstanding on the previous day

$$AD_{t} = (PA_{t} - PA_{t,1}) x \ 30 \ x \ n \tag{2}$$

onde:

 $AD_{t}$  = the variation margin value, in Brazilian Reals, corresponding to date "t";

- $PA_{t}$  = the day's settlement price, in Brazilian Reals, on day "t," for the relevant delivery month;
- PO = the trading price, in Brazilian Reals;
- n = the number of contracts;

 $PA_{t-1}$  = the settlement price on the business day preceding day "t," in Brazilian Reals, for the relevant delivery month.

The variation margin value (ADt), calculated as shown above, if positive, shall be credited to the buyer and debited to the seller. Should the calculation above present a negative value, it shall be debited to the buyer and credited to the seller.

#### 13. Settlement procedures on expiration

The positions that are not offset up to the last trading day through the execution of an offsetting transaction (buy or sell) shall be settled on expiration by a price index according to the <u>item 13.1</u>.

#### 13.1 Settlement by price index

The positions outstanding at the end of the last trading day shall be settled by BM&FBOVESPA on the last trading day through the registration of an offsetting transaction (buy or sell) by the price calculated, for the same number of contracts, in accordance with the following formula:

$$PO_{i} = \frac{\sum_{t=(d-4)}^{d} IHIDRATADO_{t}}{5}$$

Where:

PO<sub>i</sub> = the traded price relating to the settlement by price index, expressed in BRL per cubic meter;

IHIDRATADO<sub>t</sub> = the BM&FBOVESPA Cash Hydrous Ethanol Price Index for the Paulínia (SP) region, expressed in BRL per cubic meter, calculated by a renowned institution specialized in price collection, as defined in Circular Letters and published on the Exchange Website;

$$d-4$$
 = the fourth business day preceding the last trading day;

= the contract's expiration date and last trading day.

The amounts resulting from the settlement of positions by price index shall be cash settled on the business day following the last trading day, subject to the provisions of <u>item 19</u>, where applicable.

# 14. Ex-pit transactions

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Ex-pit transactions shall be allowed up to the last trading day, provided the conditions established by BM&FBOVESPA are met. These transactions shall be announced by BM&FBOVESPA, but shall not be subject to market interference.

# 15. Hedgers

Ethanol operator agents, producing mills, producer cooperatives, ethanol trading companies, fuel distributors, exporters, importers and input industries.

# 16. Margin requirements

Collateral shall be required from all customers holding open positions. Margin values shall be updated daily by the Exchange, in accordance with the margin calculation criteria for futures contracts. When the conversion of cash collateral is necessary, it shall be subject to the provisions set forth in <u>item 19</u>, where applicable.

# 17. Assets eligible to meet margin requirements

Those assets and securities accepted by the Exchange.

# 18. Trading costs

#### **18.1 Transaction fees**

Consist of the Exchange, Registration and Permanence Fees, which are calculated as per BM&FBOVESPA methodology.



#### 18.2 Due dates

**18.2.1** The Exchange and Registration Fees shall be due on the first business day following the trade date, subject to the provisions of <u>item 19</u>, where applicable.

18.2.2 The Permanence Fee shall be due on the date defined by the Exchange.

#### 19. Additional provisions for cash settlement, cash collateral and trading costs

The following shall apply to the payment and receipt of amounts resulting from day trades, variation margin requirements, trading costs, as well as to the conversion of cash collateral:

#### 19.1 Residents

The amounts shall be in Brazilian Reals, in accordance with the regular procedures of the BM&FBOVESPA Derivatives Clearinghouse.

#### 19.2 Nonresidents

The amounts shall be payable and receivable in United States Dollars in New York, USA, through the settlement banks appointed by BM&FBOVESPA.

When the conversion of amounts paid and received is necessary, the BM&FBOVESPA exchange rate benchmark, as defined in <u>item 1</u> and verified on a specific date according to the nature of each payment, shall be used as follows:

- a) Amounts resulting from day trades: the BM&FBOVESPA exchange rate benchmark verified on the trade date;
- **b)** Amounts resulting from variation margin requirements: the BM&FBOVESPA exchange rate benchmark verified on the day when the variation margin payment is due;
- c) Amounts resulting from margin requirements pledged in United States Dollars: the BM&FBOVESPA exchange rate benchmark verified on the trade date.

When conversion of amounts related to the trading costs is necessary, the PTAX rate, as defined in <u>item 1</u>, shall be used.

#### 20. Further provisions

This contract shall be subject, where applicable, to the legislation in force and to BM&FBOVESPA rules, regulations and procedures, as defined in its Bylaws, Operating Rules and Circular Letters, as well as to the specific rules set forth by the Brazilian governmental authorities that may affect the terms stated herein.

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