

Specifications guide

Americas petrochemicals

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Definitions of the trading locations for which Platts publishes daily indexes or assessments	2
Olefins	3
US aromatics	6
Latin American aromatics	8
US polymers	10
Latin American polymers	13
US intermediates	16
US hydrocarbon solvents	17
US chlor alkali	18
US oxygenated solvents	19
Liquid and gas chemical freight	21
Global petrochemical indices	22
 Revision history	 23

DEFINITIONS OF THE TRADING LOCATIONS FOR WHICH PLATTS PUBLISHES DAILY INDEXES OR ASSESSMENTS

The following specifications guide contains the primary specifications for S&P Global Platts petrochemical assessments in the Americas. All the assessments listed here employ Platts Assessments Methodology, as published at https://www.spglobal.com/platts/plattscontent/_assets/_files/en/our-methodology/methodology-specifications/platts-assessments-methodology-guide.pdf.

These guides are designed to give Platts subscribers as much information as possible about a wide range of methodology and specification questions.

This guide is current at the time of publication. Platts may issue further updates and enhancements to this methodology and will announce these to subscribers through its usual publications of record. Such updates will be included in the next version of this guide. Platts editorial staff and managers are available to provide guidance when assessment issues require clarification.

OLEFINS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV
Ethylene												
Ethylene FD Mont Belvieu USG M1	CTS (USD)	AA0SR00	AA0SR03	AA0SR05	Spot	FD	USG	Anytime during month	5 million	10 million	LB	
Ethylene FD Mont Belvieu USG M2	CTS (USD)	AA0SS00	AA0SS03	AA0SS05	Spot	FD	USG	Anytime during month	5 million	10 million	LB	
Ethylene Net Transaction Price	CTS (USD)	AAKNY00			Contract	FD	USG		5 million	10 million	LB	
Propylene												
Refinery-Grade Propylene Delivered USG	CTS (USD)	AAIKS00			Spot	FD	USG	3-30 days forward	5 million	10 million	LB	
Chemical-Grade Propylene Contract Price Delivered	CTS (USD)	PHAKA00			Contract	FD	USG		5 million	10 million	LB	
Polymer-Grade Propylene Delivered USG M1	CTS (USD)	PHAXJ04	PHBCD03	PHAYJ04	Spot	FD	USG	Any time during month	5 million	10 million	LB	
Polymer-Grade Propylene Delivered USG M2	CTS (USD)	PHAAA00	PHAAA03	PHAAA04	Spot	FD	USG	Any time during month	5 million	10 million	LB	
Polymer-Grade Propylene Contract Price Delivered	CTS (USD)	PHAJT00			Contract	FD	USG		5 million	10 million	LB	
Butadiene												
Butadiene CIF USG Weekly	CTS (USD)	PHAKC00	PHBCS03		Spot	CIF	USG	3-30 days forward	2,000 MT	4,000 MT	LB	
Butadiene CIF USG Contract	CTS (USD)	PHAKM00	PHBCT03		Contract	CIF	USG	Monthly			LB	22.046
Monoethylene Glycol (MEG)												
Monoethylene Glycol Antifreeze FOB USG	CTS (USD)	PHAXF04	PHBDG03		Spot	FOB	USG	3-30 days forward	1,000	2,000	MT	
Monoethylene Glycol Fiber Contract FOB USG	CTS (USD)	PHAXG04	PHBDH03		Contract	FOB	USG	Monthly	1,000	2,000	MT	
Platts Petrochemicals Cracker Margin (PCM)												
Ethane Cracker Margin	USD	ECMDM00			Spot		US				MT	22.046
Ethane Cracker Margin cts/Lb	CTS (USD)	ECMCP00			Spot		US				LB	
Ethane/Propane Mix Cracker Margin	USD	EPMDM00			Spot		US				MT	22.046
Ethane/Propane Mix Cracker Margin cts/lb	CTS (USD)	EPMCP00			Spot		US				LB	
Propane Cracker Margin	USD	PCMDM00			Spot		US				MT	22.046

OLEFINS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV
Propane Cracker Margin cts/Lb	CTS (USD)	PCMCP00			Spot		US				LB	
N-Butane Cracker Margin	USD	NBMDM00			Spot		US				MT	22.046
N-Butane Cracker Margin cts/Lb	CTS (USD)	NBMCP00			Spot		US				LB	
Light Naphtha Cracker Margin	USD	LNMDM00			Spot		US				MT	22.046
Light Naphtha Cracker Margin cts/lb	CTS (USD)	LMCP00			Spot		US				LB	

Olefins

Ethylene

Assessment Frequency: Platts assesses ethylene daily on a free delivered basis into the US Gulf Coast pipeline system in Mont Belvieu, Texas, which reflect the prevailing market value at 4 pm CT. Bids, offers and trades published for product in the Louisiana pipeline system may be normalized for assessment purposes.

Timing: Platts publishes the prompt month and next forward month, with assessments rolling to the next month three calendar days prior to the end of the month.

Specifications: The assessments reflect the delivery of product with a minimum purity of 99.9%.

Contract Price: Platts publishes an ethylene net transaction price monthly, which reflects an industry-settled US domestic ethylene contract price during a particular month.

Propylene

Assessment Frequency: Platts assesses refinery-grade and polymer-grade propylene daily on a free delivered basis into the US Gulf Coast pipeline system in Texas, which reflect the prevailing market value at 1:30 pm CT. Bids, offers and trades published for product in other locations or for product delivered

via rail car may be normalized to the stated pipeline basis for assessment purposes.

Timing: For refinery-grade propylene, assessments reflect delivery 3-30 days forward. For polymer-grade propylene, assessments reflect the prompt month and next forward month.

Specifications: The refinery-grade propylene assessment reflects product with a minimum purity of 65% (contained propylene only, not the propane stream). Polymer-grade assessments reflect product with a minimum purity of 99.5%.

Contract Prices: Platts publishes monthly contract prices for chemical-grade propylene with a minimum purity of 94%, and polymer-grade propylene with a minimum purity of 99.5%. These reflect industry-settled US domestic prices for contractual volumes before discounts.

Butadiene

Assessment Frequency: Platts assesses butadiene weekly on a CIF US Gulf Coast basis, which reflects the prevailing market value at 1:30 pm CT every Friday, or the last publication day of the week.

Specifications: The assessment reflects product with a minimum purity of 99.5%.

Timing: The assessment reflects material for delivery 3-30 days forward from the date of publication.

Contract Price: Platts publishes a monthly butadiene contract price, which reflects an industry-settled US domestic price for contractual volumes during a particular month, before discounts.

Monoethylene Glycol

Assessment Frequency: Platts assesses antifreeze-grade MEG weekly on a FOB US Gulf Coast basis, which reflects the prevailing market value at 1:30 pm CT every Friday, or the last publication day of the week.

Specifications: The assessment reflects product with a minimum purity of 95%.

Timing: The assessment reflects material for delivery 3-30 days forward from the date of publication.

Contract Price: Platts publishes a monthly fiber-grade contract price, which reflects product with a minimum purity of 99.8%. This contract price is calculated based on an average of North American and Asian monthly posted prices, with an applied discount.

Petrochemical Cracker Margins

Platts publishes petrochemical cracker margins, which aim to reflect basic margins of steam cracker operators in the US. These are published daily in cents/lb and the equivalent \$/mt. The values reflect the production margins of US ethylene when fed with the following basic steam cracker feedstocks - ethane, propane, ethane/propane mix, butane and naphtha. They are calculated using Platts spot assessments of ethane, propane, butane, E/P mix, LSR naphtha, ethylene, propylene, butadiene, benzene, RBOB 83.7, HSFO, 1%S fuel oil and natural gas on the US Gulf Coast. For each feedstock, the yields of various products (ethylene, propylene, butadiene, benzene, residual fuel and RBOB) are calculated and the total value of output is summed up. Operating and feedstock costs are then subtracted, resulting in a margin for each respective feedstock.

US AROMATICS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV
Benzene												
FOB US Gulf Benzene M1	CTS (USD)	PHAAE00		PHAWU04	Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
FOB US Gulf Benzene M2	CTS (USD)	AAKYD00	AAKYE00	AALDC00	Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
DDP US Gulf Benzene M1	CTS (USD)	AAWDA00	AAWDA03	AAWDA04	Spot	DDP	USG	Anytime during that month	10,000 bbl		GAL	
DDP US Gulf Benzene M2	CTS (USD)	AAWDB00	AAWDB03	AAWDB04	Spot	DDP	USG	Anytime during that month	10,000 bbl		GAL	
Benzene USG CP Mo01 cts/gal Weekly	CTS (USD)	PHAAD00	PHAXN03		Contract	USG	USG	Anytime during that month	10,000 bbl		GAL	
FOB US Gulf Benzene M3	CTS (USD)	AAIUL00	AAIUM00		Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
FOB US Gulf Benzene Q1	CTS (USD)	AAIUN00	AAIU000		Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
Toluene												
FOB NITN grade toluene M1	CTS (USD)	PHAAR00	PHAXW03	PHAWW04	Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
FOB NITN grade toluene M2	CTS (USD)	AASMY00	AASMY03	AASMY04	Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
FOB COMM grade toluene	CTS (USD)	PHAA000	PHAYD03		Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
Mixed, isomer xylenes												
Mixed Xylene USG FOB M1	CTS (USD)	PHBHN00	PHBHP03	PHBHO04	Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
Mixed Xylene USG FOB M2	CTS (USD)	AASMZ00	AASMZ03	AASMZ04	Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
Isomer Xylene USG FOB M1	CTS (USD)	PHBHQ04	PHBHR03		Spot	FOB	USG	Anytime during that month	10,000 bbl		GAL	
Styrene monomer												
Styrene FOB USG M1	CTS (USD)	AAIKW00	AAIKX00	AAIUY00	Spot	FOB	USG	Anytime during that month	3,000 MT	5,000 MT	LB	
Styrene FOB USG M2	CTS (USD)	AAJLW00	AAJLW03	AAJLW04	Spot	FOB	USG	Anytime during that month	3,000 MT	5,000 MT	LB	
Styrene FOB USG M1	USD	ASFUA00	ASFUA03	ASFUA04	Spot	FOB	USG	Anytime during that month	3,000 MT	5,000 MT	MT	
Styrene FOB USG M2	USD	ASFUB00	ASFUB03	ASFUB04	Spot	FOB	USG	Anytime during that month	3,000 MT	5,000 MT	MT	
Styrene US Domestic Transaction Price	CTS (USD)	AASIH00			Contract	FOB	USG ex-works	Monthly	1,000 MT	5,000 MT	LB	
Paraxylene												
Paraxylene FOB USG	USD	AAUXG00	AAUXG03	AAUXG01	Spot	FOB	USG	3-30 days forward	5,000 MT		MT	
Paraxylene USG CP	CTS (USD)	PHAB000	PHAXY03		Contract	USG	USG	Monthly			LB	
Orthoxylene												
Orthoxylene USG CP cts/lb	CTS (USD)	PHABF00	PHAXV03		Contract	FOB	USG	Monthly				
Orthoxylene FOB USG cts/lb	CTS (USD)	PHABG00	PHAXT03		Spot	FOB	USG	3-30 days forward	1,000	3,000	MT	
Methanol												
Methanol FOB USG (M1)	CTS (USD)	AAIKU00	AAIKV00	AAIUX00	Spot	FOB	USG	Anytime during that month	10,000bbl		GAL	
Methanol FOB USG (M2)	CTS (USD)	AAIKY00	PHMFA03	AAIKY04	Spot	FOB	USG	Anytime during that month	10,000bbl		GAL	
Methanol US Domestic Net CP	CTS (USD)	AAIGF00	AAIHB00		Net contract	FOB	USG	Anytime during that month	10,000bbl		GAL	
Methanol USG list CP cts/gal	CTS (USD)	PHACE00	PHAYC03		List contract	FOB	USG	Anytime during that month	10,000bbl		GAL	
Methanol FOB USG (M1) \$/mt	USD	PHACF00	AAGJU00	AAXNJ00	Spot	FOB	USG	Anytime during that month	10,000bbl		MT	
Methanol FOB USG (M2) \$/mt	USD	PHMFA00	PHMFA03	AAXNJ04	Spot	FOB	USG	Anytime during that month	10,000bbl		MT	

US AROMATICS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV
MTBE												
MTBE FOB USG	CTS (USD)	PHAKY00	PHAVYA03	PHAVV04	Spot	FOB	USG	5-15 days	25,000bbl USG		GAL	
MTBE FOB USGC \$/mt	USD	AAWL00	PHAVQ03		Spot	FOB	USG	5-15 days	25,000bbl USG		MT	3.55
Cumene												
Cumene FOB USG	CTS (USD)	AAQJC00	AAQJC03		Spot	FOB	USG	Anytime that month	10,000 bbl		LB	

US aromatics

Benzene

Assessment Frequency: Platts assesses benzene daily on an FOB US Gulf Coast (Houston-Texas City area) basis and on a DDP US Gulf Coast basis, which reflect the prevailing market price at 4 pm CT.

Timing: On an FOB basis, Platts publishes three months forward as well as the prompt quarter, while on a DDP basis, Platts publishes two months forward. The assessments roll to the next forward month five calendar days prior to the end of the month.

Specifications: The assessments reflect product that conforms to ASTM D-2359/90 standards.

Contract Price: This reflects a monthly industry settlement for contractual volumes.

Toluene

Assessment Frequency: Platts assesses nitration-grade toluene daily, which reflects the prevailing market value at 1:30 pm CT. Platts also assesses commercial-grade toluene weekly, which reflects the prevailing market value at 1:30 pm CT every Friday, or the last publication day of the week. Both grades are assessed on an FOB US Gulf Coast (Houston-Texas City area) basis.

Timing: Nitration-grade toluene assessments are published two months forward. Commercial-grade toluene assessments reflect the prompt month. The assessments roll to the next forward month five calendar days prior to the end of the month.

Specifications: Nitration-grade toluene assessments reflect product that confirms to ASTM D-841 and is typically transported by barge. The commercial-grade toluene assessment reflects product suitable for hydrodealkylation or gasoline blending and is typically transported by rail car.

Mixed, isomer xylenes

Assessment Frequency: Platts assesses mixed xylene daily, which reflects the prevailing market value at 1:30 pm CT. Platts also publishes an isomer xylene assessment which is reflective of the prevailing mixed xylene market price, at 1:30 pm CT every Friday, or the last publication day of the week. Assessments are on an FOB US Gulf Coast (Houston-Texas City area) basis.

Timing: Platts publishes mixed xylene assessments two months forward and the prompt month for isomer xylene, with assessments rolling to the next forward month five calendar days prior to the end of the month.

Specifications: Assessments reflect mixed xylene that conforms

to ASTM-5211 (low bromine) on a daily basis. Any bids, offers or deals that conform to ASTM D-843 also can be considered and normalized. Isomer xylene assessments conform to ASTM-5211.

Styrene Monomer

Assessment Frequency: Platts assesses styrene monomer daily on an FOB US Gulf Coast basis, which reflects the prevailing market value at 4 pm CT.

Timing: Platts publishes assessments for the current month and next forward month. The assessments roll to the next forward month five calendar days prior to the end of the month.

Specifications: The assessments reflect product that conforms to ASTM D-2827 standards.

Contract Price: Platts publishes a weekly US Domestic Transaction Price, which reflects an industry-standard formula comprising feedstock natural gas and benzene prices and the average spot price of styrene monomer.

Paraxylene

Assessment Frequency: Platts assesses paraxylene daily on an FOB US Gulf Coast basis, which reflects the prevailing market value at 1:30 pm CT.

Timing: Assessments are for product loading 3-30 days forward from the date of publication

Specifications: The assessment reflects product with a minimum purity of 99.7%.

Contract Price: This reflects a monthly industry settlement for contractual volumes. In the absence of a settlement, Platts will publish the most recent settlement.

Orthoxylene

Assessment Frequency: Platts assesses orthoxylene weekly on an FOB US Gulf Coast basis, which reflects the prevailing market value at 1:30 pm CT every Friday, or the last publication day of the week.

Timing: Assessments reflect product loading 3-30 days forward from the date of publication.

Specifications: The assessment reflects product with a minimum purity of 98% and a maximum 0.3% non-aromatic content by weight.

Contract Price: This reflects a monthly industry settlement for contractual volumes. In the absence of a settlement, Platts will publish the most recent settlement.

Methanol

Assessment Frequency: Platts assesses methanol daily on an FOB US Gulf Coast (Houston – Texas City area) basis, which

reflects the prevailing market value at 1:30 pm CT.

Timing: Platts publishes assessments for the current month and next forward month. The assessments roll to the next forward month five calendar days prior to the end of the month.

Specifications: The assessments reflect product with maximum water content of 0.1% by weight.

Contract price: Platts publishes monthly producer-posted prices, as well as a net contract assessment that reflect typical discounts, based on market feedback.

MTBE

Assessment Frequency: Platts assesses MTBE daily on an FOB US Gulf Coast (Houston-Texas City area) basis, which reflects the prevailing market value at 1:30 pm CT, for loading 5-15 days forward.

Timing: Bids and offers posted in the MOC reflect five-day laycans within the 5-15 days forward assessment period. Laycans are made up of a front end reflecting 5-9 days forward, a mid-window reflecting 8-12 days forward and a back end reflecting 11-15 days forward.

After trading in the MOC, the seller is expected to nominate the port and terminal in the USGC area and to inform the buyer within five days of the first day of the five-day laycan. The buyer is then expected to nominate the vessel and the loading dates within the five-day laycan, pending terminal acceptance.

In the absence of bids, offers and trades in this market, Platts

may consider price information in related markets, including, but not limited to, Northwest Europe pricing on an FOB ARA basis.

The MTBE Market-on-Close assessment process is facilitated through the eWindow technology. For further details, please consult the Petrochemicals Timing and Increment Guidelines at <https://www.spglobal.com/platts/en/our-methodology/methodology-specifications/petrochemicals/petrochemicals-timing-and-increment-guidelines>.

Specifications: The assessment reflects product of minimum 95% purity, water content of maximum 1,500 ppm, methanol content of maximum 5,000 ppm.

Cumene

Assessment Frequency: Platts assesses cumene daily on an FOB US Gulf Coast basis, which reflects the prevailing market value at 4 pm CT. The cumene assessment is calculated, taking into account the feedstock cost of benzene and refinery-grade propylene and a production adder based on market feedback.

Timing: Assessments reflect the prompt month, with the assessment rolling to the next forward month five calendar days prior to the end of the month.

Specifications: The assessment reflects product conforming to ASTM D7057 standards.

LATIN AMERICAN AROMATICS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM
Benzene											
Benzene FOB Brazil	USD	PHATP00	PHATQ03		Spot	FOB	Brazil	3-30 days forward	1,500		MT
Toluene											
Toluene FOB Brazil	USD	AASAP04	AASAP03		Spot	FOB	Brazil	3-30 days forward	3,000		MT
Mixed Xylenes											
Mixed Xylenes FOB Brazil	USD	AASAQ04	AASAQ03		Spot	FOB	Brazil	3-30 days forward	3,000		MT

Latin American aromatics

Benzene

Assessment Frequency: Platts assesses benzene weekly on an FOB Brazil basis, which reflects the prevailing market value at 4 pm CT every Friday, or the last publication day of the week.

Timing: The assessment reflects material loading 3-30 days forward from the date of publication.

Specifications: The assessment reflects product meeting ASTM D-2359/90 standards.

Toluene

Assessment Frequency: Platts assesses toluene weekly on an FOB Brazil basis, which reflects the prevailing market value at 1:30 pm CT every Friday, or the last publication day of the week.

Timing: The assessment reflects material loading 3-30 days forward from the date of publication.

Specifications: The assessment reflects product meeting ASTM D841 (nitration grade) standard.

Mixed Xylenes

Assessment Frequency: Platts assesses mixed xylenes weekly on an FOB Brazil basis, which reflects the prevailing market value at 1:30 pm CT every Friday, or the last publication day of the week.

Timing: The assessment reflects material loading 3-30 days forward from the date of publication.

Specifications: The assessment reflects product meeting ASTM D5211 (isomer grade) standards.

US POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM
Polyethylenes											
HDPE Blowmolding FAS Houston	USD	PHAHG00	PHBBF03		Spot	FAS	Houston	3-30 days forward	250		MT
HDPE Blowmolding USGC	USD	AAWCZ00	AAWCZ03		Spot	FAS	Houston	3-30 days forward	250		MT
HDPE Injection FAS Houston Weekly	USD	PHAHJ00	PHBBA03		Spot	FAS	Houston	3-30 days forward	250		MT
HDPE HMW Film FAS Houston Weekly	USD	AAHYA00	AAHYB00		Spot	FAS	Houston	3-30 days forward	250		MT
LDPE FAS Houston	USD	PHAHP00	PHBAR03	AAQNT00	Spot	FAS	Houston	3-30 days forward	250		MT
LLDPE Butene FAS Houston	USD	PHAGX00	PHBAV03	AAQNU00	Spot	FAS	Houston	3-30 days forward	250		MT
HDPE Blowmolding US Domestic Dlv'd Railcar	CTS (USD)	AALBL00	AALBM00		Contract	Delivered Railcar	US Domestic	Monthly	50 million		LB/YR
HDPE Injection US Domestic Dlv'd Railcar	CTS (USD)	AALBN00	AALBO00		Contract	Delivered Railcar	US Domestic	Monthly	50 million		LB/YR
HDPE Film US Domestic Dlv'd Railcar	CTS (USD)	AASJH00 / AALBP00	AALBQ00		Contract	Delivered Railcar	US Domestic	Monthly	50 million		LB/YR
LLDPE Butene US Domestic Dlv'd Railcar	CTS (USD)	AAGZO00	AAGNM00		Contract	Delivered Railcar	US Domestic	Monthly	100 million		LB/YR
LDPE US Domestic Dlv'd Railcar	CTS (USD)	AAGZN00	AAGNL00		Contract	Delivered Railcar	US Domestic	Monthly	100 million		LB/YR
HDPE Blowmolding Domestic Dlv'd Railcar	USD	AASJG00	AASJG03		Contract	Delivered Railcar	US Domestic	Monthly	22,675		MT/YR
HDPE Injection US Domestic Dlv'd Railcar	USD	AASJA00	AASJA03		Contract	Delivered Railcar	US Domestic	Monthly	22,675		MT/YR
HDPE HMW Film US Domestic Dlv'd Railcar	USD	AASJH00	AASJH03		Contract	Delivered Railcar	US Domestic	Monthly	22,675		MT/YR
LLDPE Butene US Domestic Dlv'd Railcar	USD	AASIZ00	AASIZ03		Contract	Delivered Railcar	US Domestic	Monthly	45,350		MT/YR
LDPE US Domestic Dlv'd Railcar	USD	AASII00	AASII03		Contract	Delivered Railcar	US Domestic	Monthly	45,350		MT/YR
LLDPE metallocene FAS Houston	USD	AAXUN00	AAXUN03		Spot	FAS	Houston	3-30 days forward	100		MT
LLDPE C6 FAS Houston	USD	AAXUL00	AAXUL03		Spot	FAS	Houston	3-30 days forward	100		MT
Polypropylene											
PP Homopolymer injection FAS Houston	USD	PHAIB00	PHBBU03	AAQNV00	Spot	FAS	Houston	3-30 days forward	250		MT
PP Co-polymer FAS Houston	USD	PHAHV00	PHBCH03		Spot	FAS	Houston	3-30 days forward	250		MT
PP Homopolymer injection Delivered Railcar	CTS (USD)	AAGZL00	AAGNJ00		Contract	Delivered Railcar	US Domestic	Monthly	20 million		LB/YR
PP Fiber Delivered Railcar	CTS (USD)	AAGZM00	AALBS00		Contract	Delivered Railcar	US Domestic	Monthly	20 million		LB/YR
PP Homopolymer injection Delivered Railcar	USD	AASJK00	AASJK03		Contract	Delivered Railcar	US Domestic	Monthly	9,000		MT/YR
PP Fiber Delivered Railcar	USD	AASJL00	AASJL03		Contract	Delivered Railcar	US Domestic	Monthly	9,000		Mt/YR
Polystyrene											
GPPS US Domestic dlv'd railcar Weekly	CTS (USD)	AAGZP00	AAGNN00		Contract	Delivered Railcar	US Domestic	Monthly	25 million	50 million	LB/YR
HIPS US Domestic dlv'd railcar Weekly	CTS (USD)	AAGZQ00	AAGNO00		Contract	Delivered Railcar	US Domestic	Monthly	25 million	50 million	LB/YR
GPPS US Domestic dlv'd railcar Weekly	USD	AASJI00	AASJI03		Contract	Delivered Railcar	US Domestic	Monthly	11,338	22,675	MT/YR
HIPS US Domestic dlv'd railcar Weekly	USD	AASJJ00	AASJJ03		Contract	Delivered Railcar	US Domestic	Monthly	11,338	22,675	MT/YR
GPPS FAS Houston Weekly	USD	PHAIH00	PHBBK03		Spot	FAS	Houston	3-30 days forward	250 mt		MT
HIPS FAS Houston Weekly	USD	PHAIN00	PHBBP03		Spot	FAS	Houston	3-30 days forward	250 mt		MT

US POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM
ABS											
ABS Inj US Domestic Dlv'd railcar Weekly	CTS (USD)	AARTU00	AARTU03		Contract	Delivered Railcar	Railcar	Monthly	30 million	50 million	LB/YR
ABS Inj US Domestic Dlv'd railcar Weekly	USD	AASJM00	AASJM03		Contract	Delivered Railcar	Railcar	Monthly	13,605	22,675	MT/YR
Polyvinyl Chloride											
PVC Susp FAS Houston	USD	PHAIT00	PHBAM03		Spot	FAS	Houston	3-30 days forward	250		MT
PVC Susp US Domestic Dlv'd Railcar Weekly	USD	AASIX00	AASIX03		Contract	Delivered Railcar	US Domestic	Monthly	68,058		MT/YR
PVC Susp US Domestic dlv'd Railcar cts/lb Weekly	CTS (USD)	AAGZR00	AAGNP00		Contract	Delivered Railcar	US Domestic	Monthly	150 million		LB/YR
Polyethylene Terephthalate (PET)											
PET Bottle Grade DDP USWC	USD	AASMM00	AASMM03		Spot	DDP	US West Coast	3-30 days forward	100		MT
PET Bottle Grade US Rail CP	USD	AASMN00			Contract	Delivered railcar	US Domestic	Monthly	20 million		LB/YR

US polymers

US polymer spot and contract assessments reflect the following unless otherwise specified:

Assessment Frequency: Daily assessments reflect the prevailing market value at 1:30 pm CT.

Weekly assessments reflect the prevailing market value at 1:30 pm CT every Wednesday.

Spot timing and basis: US export assessments reflect material loading 3-30 days forward from the date of publication, bagged and basis free-along-ship (FAS) Houston area.

Contract timing and basis: Weekly domestic assessments are based on contract pricing for large US buyers and reflect settlements and negotiations between producers and buyers through the course of the delivery month. Assessments reflect material delivered by rail.

Polyethylene

Specifications: LDPE assessment reflect product with a melt flow index of 1.8-2.5. LLDPE assessments reflect butene-1 grade with a melt flow rate of around 1.0. Standard LLDPE C6 reflects 1-Hexene comonomer based on the Ziegler Natta catalyst, with density between 917-922 kg/m³ for both cast and blown film, and a melt flow index of around 0.85. Metallocene assessments reflect 1-Hexene comonomer with a density of 918-940 kg/m³ for both cast and blown film, and a melt flow index of between 0.3-4.5. High Density Polyethylene (HDPE): US assessments reflect both injection and blowmolding grades. Injection grade assessments reflect material with a melt flow rate of 2.0-25, with the liquidity concentrated on crate-grade material with a melt flow index between 5-11. Blowmolding grade assessments reflect product with a melt flow rate 0.25 and higher. Film grade assessments reflect product with a melt flow rate of 0.07-0.18.

Polypropylene

Specifications: Raffia and injection-grade material are considered in the PP homopolymer daily export assessment,

with a melt flow index of 2.5-10. PP copolymer assessments include the range of block grade on the low end and random grade on the high end.

Polystyrene

Specifications: Platts assesses both general-purpose (GPPS) and high-impact (HIPS) polystyrene on the US Gulf Coast. The GPPS assessment reflects product with a melt flow index of 8-12. The HIPS assessment reflects product with a melt flow index of 3-8.

ABS (Acrylonitrile Butadiene Styrene)

Specifications: ABS assessments reflect average injection-grade material with a melt flow index between 10-40.

Polyvinyl Chloride

Specifications: Assessments reflect pipe-grade product with a K-value of 65.

Polyethylene Terephthalate

Timing: US import assessments reflect delivery 3-30 days forward from date of publication, on a US West Coast delivered and duty paid basis.

Specifications: Assessments reflect bottle grade PET with an internal viscosity of 0.76-0.84.

Contract price: Contract prices reflect negotiated prices between producers and distributors for contractual volumes delivered by rail.

LATIN AMERICAN POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM
Polyethylenes											
HDPE HMW film FOT Brazil	USD	PHATX00	PHATY03		Spot	FOT	Brazil	3-30 days forward	100		MT
HDPE HMW film CFR Brazil	USD	AAVRF04	AAVRF03		Spot	CFR	Brazil	20-40 days forward	250		MT
HDPE HMW film CFR West Coast South America	USD	AASVM00	AASVM03		Spot	CFR	WCSA	20-40 days forward	100	300	MT
HDPE injection FOT Brazil	USD	PHATZ00	PHAUA03		Spot	FOT	Brazil	3-30 days forward	100		MT
HDPE injection CFR Brazil	USD	AAVRD04	AAVRD03		Spot	CFR	Brazil	20-40 days forward	250		MT
HDPE injection CFR West Coast South America	USD	AASVK00	AASVK03		Spot	CFR	WCSA	20-40 days forward	100	300	MT
HDPE blowmolding FOT Brazil	USD	PHAVZ00	PHATW03		Spot	FOT	Brazil	3-30 days forward	100		MT
HDPE blowmolding CFR Brazil	USD	AAVRE04	AAVRE03		Spot	CFR	Brazil	20-40 days forward	250		MT
HDPE blowmolding CFR West Coast South America	USD	AASVL00	AASVL03		Spot	CFR	WCSA	20-40 days forward	100	300	MT
LDPE FOT Brazil	USD	PHAUD00	PHAUE03		Spot	FOT	Brazil	3-30 days forward	100		MT
LDPE CFR Brazil	USD	AAVRB04	AAVRB03		Spot	CFR	Brazil	20-40 days forward	250		MT
LDPE CFR West Coast South America	USD	AASVI00	AASVI03		Spot	CFR	WCSA	20-40 days forward	100	300	MT
LLDPE butene FOT Brazil	USD	PHATT00	PHATU03		Spot	FOT	Brazil	3-30 days forward	100		MT
LLDPE butene CFR Brazil	USD	AAVRC04	AAVRC03		Spot	CFR	Brazil	20-40 days forward	250		MT
LLDPE butene CFR West Coast South America	USD	AASVJ00	AASVJ03		Spot	CFR	WCSA	20-40 days forward	100	300	MT
HDPE blowmolding Delivered Mexico City	USD	AABMD04	AABMD03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
HDPE blowmolding Delivered Mexico City	Peso	AABMP04	AABMP03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
HDPE injection Delivered Mexico City	USD	AAIJM04	AAIJM03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
HDPE injection Delivered Mexico City	Peso	AAIJD04	AAIJD03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
HDPE HMW film Delivered Mexico City	USD	AABAM04	AABAM03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
HDPE HMW film Delivered Mexico City	Peso	AABAN04	AABAN03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
LDPE Delivered Mexico City	USD	ALDPD04	ALDPD03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
LDPE Delivered Mexico City	Peso	ALDED04	ALDED03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
LLDPE butene Delivered Mexico City	USD	ALDPE04	ALDPE03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
LLDPE butene Delivered Mexico City	Peso	ALDPF04	ALDPF03		Spot	Delivered Railcar	Mexico City	3-30 days forward	100	300	MT
HDPE blowmolding Delivered Sao Paulo	Real	AABMH04	AABMH03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
HDPE blowmolding Delivered Sao Paulo	USD	AABMG04	AABMG03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
HDPE injection Delivered Sao Paulo	Real	AABMJ04	AABMJ03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
HDPE injection Delivered Sao Paulo	USD	AABMI04	AABMI03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
HDPE HMW film Delivered Sao Paulo	Real	AABMF04	AABMF03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
HDPE HMW film Delivered Sao Paulo	USD	AABME04	AABME03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
LDPE Delivered Sao Paulo	Real	AABML04	AABML03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
LDPE Delivered Sao Paulo	USD	AABMK04	AABMK03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
LLDPE butene Delivered Sao Paulo	Real	AABMN04	AABMN03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
LLDPE butene Delivered Sao Paulo	USD	AABMM04	AABMM03		Spot	Delivered Truck	Sao Paulo	3-30 days forward	100	500	MT
HDPE blowmolding Delivered Buenos Aires	USD	AABAE04	AABAE03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
HDPE blowmolding Delivered Buenos Aires	Peso	AABAF04	AABAF03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
HDPE injection Delivered Buenos Aires	USD	AABAU04	AABAU03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
HDPE injection Delivered Buenos Aires	Peso	AABAP04	AABAP03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
HDPE HMW film Delivered Buenos Aires	USD	AABAS04	AABAS03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
HDPE HMW film Delivered Buenos Aires	Peso	AABAJ04	AABAJ03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
LDPE Delivered Buenos Aires	USD	AABAV04	AABAV03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
LDPE Delivered Buenos Aires	Peso	AABAW04	AABAW03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
LLDPE butene Delivered Buenos Aires	USD	AABAC04	AABAC03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
LLDPE butene Delivered Buenos Aires	Peso	AABAY04	AABAY03		Spot	Delivered Railcar/Truck	Buenos Aires	3-30 days forward	100	300	MT
HDPE blowmolding Delivered Bogota	USD	AABAG04	AABAG03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT
HDPE blowmolding Delivered Bogota	Peso	AABAH04	AABAH03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT

LATIN AMERICAN POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM
HDPE injection Delivered Bogota	USD	AABAQ04	AABAQ03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT
HDPE injection Delivered Bogota	Peso	AABAR04	AABAR03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT
HDPE HMW film Delivered Bogota	USD	AABAK04	AABAK03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT
HDPE HMW film Delivered Bogota	Peso	AABAL04	AABAL03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT
LDPE Delivered Bogota	USD	AABAY04	AABAY03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT
LDPE Delivered Bogota	Peso	AABAX04	AABAX03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT
LLDPE butene Delivered Bogota	USD	AABAA04	AABAA03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT
LLDPE butene Delivered Bogota	Peso	AABAB04	AABAB03		Spot	Delivered Truck	Bogota	3-30 days forward	100	300	MT
Polypropylene											
PP Homopolymer FOT Brazil	USD	PHATN00	PHAT003		Spot	FOT	Brazil	3-30 days forward	100		MT
PP Homopolymer CFR Brazil	USD	AAVRA04	AAVRA03		Spot	CFR	Brazil	20-40 days forward	250		MT
PP Homopolymer CFR West Coast South America	USD	AASVO00	AASVO03		Spot	CFR	WCSA	20-40 days forward	100	300	MT
PP Co-polymer FOT Brazil	USD	PHATL00	PHATM03		Spot	FOT	Brazil	3-30 days forward	100		MT
PP Co-polymer CFR Brazil	USD	AAVRG04	AAVRG03		Spot	CFR	Brazil	20-40 days forward	250		MT
PP Co-polymer CFR West Coast South America	USD	AASVN00	AASVN03		Spot	CFR	WCSA	20-40 days forward	100	300	MT
Polyvinyl Chloride											
PVC suspension CFR Brazil	USD	AAVPZ04	AAVPZ03		Spot	CFR	Brazil	20-40 days forward	250		MT
PVC suspension CFR West Coast South America	USD	AASVH00	AASVH03		Spot	CFR	WCSA	20-40 days forward	100	300	MT

Latin American polymers

Polyethylene

Assessment Frequency: Platts assesses low-density polyethylene (LDPE), linear low-density PE (LLDPE), injection grade high-density PE (HDPE), blowmolding HDPE and high-molecular weight film grade HDPE weekly, which reflect the prevailing market value at 1:30 pm CT every Wednesday.

Basis and locations: Spot prices are assessed basis free-on-truck (FOT) Brazil (to Mercosur members Argentina, Uruguay or Paraguay). West Coast Latin American prices are assessed basis CFR West Coast South America [includes main ports in Chile (Valparaiso, San Antonio, others), Colombia (Buenaventura) and Ecuador (Guayaquil) and Peru (Callao)] with credit of 90-150 days. Brazilian import prices are assessed on a CFR Brazil Main Port basis, excluding duty, with credit of 90 days. Mexico

assessments reflect a delivered Mexico City price and are for material delivered by a rail car. Domestic Brazil assessments reflect a delivered Sao Paulo price and are for material delivered by truck with a letter of credit of 28-35 days. Argentina assessments reflect a delivery in the greater Buenos Aires area by rail car or truck with a letter of credit of 60-90 days. Colombia assessments reflect delivery in the greater Bogota area by truck with a letter of credit of 60-90 days.

Timing: FOT Brazil assessments reflect material loading 3-30 days forward from the date of publication. CFR West Coast South America and CFR Brazil assessments reflect material for delivery 20-40 days forward from the date of publication. Domestic Mexico, Brazil, Argentina and Colombia assessments are for material delivered by rail 3-30 days forward.

Specifications: Low-Density Polyethylene: Assessments reflect product within the melt flow range of 0.1-3.5. For domestic

Mexico, Brazil, Colombia and Bogota LDPE assessments reflect a melt flow index of 1.8-2.5

Linear Low-Density Polyethylene: Assessments for all regions reflect product that is butene-1 grade with a melt flow rate of around 1.0.

High-Density Polyethylene: Assessments for CFR Brazil and CFR West Coast South America reflect product that is injection grade, blowmolding grade or high molecular weight film grade. Injection-grade assessments cover material with a melt flow rate of 2.0-25. Blowmolding and film-grade assessments cover product within the melt flow range of 2.0-16.0. Mexico assessments are for HDPE blowmolding grade with a melt flow rate 0.25 and higher; and HDPE injection grade with a melt flow rate of 2.0-25, with liquidity concentrated on crate grade material with a melt flow index between 5-11; HDPE film with a melt flow rate of 0.06 and higher. For domestic Brazil, Argentina

and Colombia assessments are for HDPE blowmolding and HDPE film grades with a melt flow rate 0.25 and higher, and HDPE injection grade with a melt flow rate of 2.0-25.

Polypropylene

Assessment Frequency: Platts assesses homopolymer and copolymer grade polypropylenes weekly, which reflect the prevailing market price at 1:30 pm CT each Wednesday.

Basis and locations: Spot prices are assessed basis free-on-truck (FOT) Brazil (to Mercosur members Argentina, Uruguay or Paraguay). CFR West Coast South America includes main ports in Chile (Valparaiso, San Antonio, others), Colombia (Buenaventura) and Ecuador (Guayaquil and Peru (Callao) with credit of 90-150 days. Brazilian import prices are assessed on a CFR Brazil Main Port basis, excluding duty, with credit of 90 days.

Timing: FOT Brazil assessments reflect material loading 3-30 days from the date of publication. CFR West Coast South America and CFR Brazil assessments reflect material for delivery 20-40 days forward from the date of publication.

Specifications: Homopolymer PP assessments reflect product within the melt flow range of 0.8-35.0. Copolymer PP assessments reflect product with a melt flow range of 1.5-25.0.

Polyvinyl Chloride

Assessment Frequency: Platts assesses polyvinyl chloride weekly, which reflect the market price at 1:30 pm CT each Wednesday.

Basis and locations: CFR West Coast South America includes main ports in Chile (Valparaiso, San Antonio, others), Colombia (Buenaventura) and Ecuador (Guayaquil), in addition to Peru's Callao, with credit of 90-150 days. Brazilian import prices are assessed on a CFR Brazil Main Port basis, excluding duty, with credit of 90 days.

Timing: CFR West Coast South America and CFR Brazil assessments reflect material for delivery 20-40 days forward from the date of publication.

Specifications: Assessments reflect pipe grade product with a K-value of 65.

US INTERMEDIATES

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV
Normal butanol												
Normal butanol Weekly	USD	PHAQS00	PHAQT03		Spot	FOB	USG	3-30 days forward	500		MT	
Normal Butanol US Domestic Weekly	CTS (USD)	PHAQU00	PHAQV03		Contract	Delivered	East Rockies	Monthly	44,000	45,000	LB	
Diisomyl phthalate, Dioctyl terphthalate												
DINP cts/lb Dlvd Weekly	CTS (USD)	PHAD004	PHADI03		Spot	Delivered	East Rockies	Monthly	44,000	45,000	LB	
DOTP US cts/lb Dlvd Weekly	CTS (USD)	PHADI04	PHAD003		Spot	Delivered	East Rockies	Monthly	44,000	45,000	LB	
2-ethyl hexanol												
2-EH FOB USG Weekly	USD	PHAQW00	PHAQX03		Spot	FOB	USG	3-30 days forward	500		MT	
2-EH US Domestic Weekly	CTS (USD)	PHAQY00	PHAQZ03		Contract	Delivered	East Rockies	Monthly	44,000	45,000	LB	
Phthalic anhydride												
PA FL FD US Domestic cts/lb	CTS (USD)	PHARE00	PHARF03		Contract	Delivered	DER	Monthly	500	1,000	MT	
PA MN FD US Domestic cts/lb	CTS (USD)	PHARC00	PHARD03		Contract	Delivered	DER	Monthly	500	1,000	MT	
Acetic acid, VAM												
Acetic acid cts/lb weekly	CTS (USD)	AAIHD00	AAIHE00		contract	ex-plant FOB	USG	quarterly	40 million		LB/YR	
Acetic acid export weekly	USD	PHARG00	PHARH03		spot	FOB	USG	3-30 days forward	1,000		MT	
VAM cts/lb weekly	CTS (USD)	AAIHF00	AAIHG00		contract	ex-plant FOB	USG	quarterly	100 million		LB/YR	
VAM export weekly	USD	PHARK00	PHARL03		spot	FOB	USG	3-30 days forward	1,000		MT	
Acrylonitrile												
ACN Export Weekly	USD	PHAR000	PHARP03		Spot	FOB	USG	3-30 days forward	2,000	3,000	MT	
ACN FD US Domestic Weekly	CTS (USD)	PHARQ00	PHARR03		Contract	ex-plant FOB	USG	Monthly			LB	
Ethylene Dichloride/Vinyl Chloride Monomer												
EDC Weekly	USD	PHARS00	PHART03		Spot	FOB	USG	3-30 days forward	2,000	3,000	MT	
VCM FOB USG Weekly	USD	PHARW00	PHARX03		Spot	FOB	USG	3-30 days forward	1,000	3,000	MT	
VCM US Domestic Delivered cts/lb Weekly	CTS (USD)	PHARY00	PHARZ03		Contract	Delivered via railcar	US Domestic	Monthly	1,000	3,000	MT	
Purified terephthalic acid												
PTA CFR North America Delivered CP Monthly	USD	AAUNY04			Contract	CFR	North America	Monthly	200,000	220,000	LB	
PTA CFR North America Delivered CP cts/lb Monthly	CTS (USD)	AAUNY00			Contract	CFR	North America	Monthly	200,000	220,000	LB	

US intermediates

Normal Butanol

Assessment Frequency: Platts publishes a weekly spot normal butanol assessment, which reflects the prevailing FOB USGC market value at 1:30 pm CT every Thursday.

Contract price: Contract prices reflect monthly negotiated prices between producers and medium-sized customers for contractual volumes by tank car or truck.

Specifications: Minimum purity of 99%, and maximum water content of 0.05%.

Diisomyl phthalate and dioctyl terephthalate

Assessment Frequency: Platts publishes weekly spot diisomyl (DINP) and dioctyl terephthalate (DOTP) assessments, which reflect the prevailing market price at 1:30 pm CT each Thursday.

Contract price: Contract prices reflect monthly negotiated prices between producers and medium-sized customers for contractual volumes by tank car or truck.

Specifications: DINP density between 0.97-0.98 g/cm³, with a minimum purity level at 99.6% and a maximum water content of 0.05%. DOTP density between 0.98-0.99 g/cm³, with a minimum purity of 99%. Maximum water content of 0.1%.

2-Ethyl Hexanol

Assessment Frequency: Platts publish a weekly spot 2-ethyl hexanol assessments, which reflects the prevailing FOB USGC market price at 1:30 pm CT each Thursday.

Contract price: Contract prices reflect monthly negotiated prices between producers and medium-sized customers for contractual volumes by tank car or truck.

Specifications: Minimum purity of 99%. Maximum water content of 0.05%.

Phthalic Anhydride

Assessment Frequency: Platts publishes weekly phthalic anhydride (PA) assessments, which reflect the prevailing market price at 1:30 p.m. CT each Thursday.

Domestic contract price assessments reflect the previous month's orthoxylene contract price with production adders. Assessments reflect sales to medium-sized customers

Specifications: Platts assessments reflect both molten and flake product with minimum purity of 99.5%. Residual maleic anhydride content is a maximum 0.15%.

Acetic Acid, Vinyl Acetate Monomer

Assessment Frequency: Platts publishes weekly spot acetic acid (AA) and vinyl acetate monomer (VAM) assessments, which reflect the market price at 1:30 p.m. CT each Thursday.

Contract price: Weekly domestic contract price assessments reflect negotiations and settlements between producers and buyers and can evolve during the course of the delivery quarter.

Timing and basis: Spot assessments reflect material loading 3-30 days forward from the date of publication, basis FOB Houston. Contract prices are basis FOB ex-plant.

Specifications: AA: 99.8% purity, maximum water content of 100 ppm. VAM: 99.9% purity.

Acrylonitrile

Assessment Frequency: Platts publishes weekly spot acrylonitrile assessments, which reflect the prevailing market price at 1:30 pm CT each Tuesday.

Timing: Spot assessments reflect material loading 3-30 days forward from the date of publication basis FAS Houston.

Contract price: Domestic contract price assessments reflect industry-accepted formula-based monthly contract prices. The formula incorporates the chemical-grade propylene contract price and an industry-settled ammonia contract price.

Specifications: Minimum purity of 99%, maximum acetonitrile content of 500 ppm. Maximum water content of 0.5%.

Ethylene Dichloride/Vinyl Chloride Monomer

Assessment Frequency: Platts assesses ethylene dichloride and vinyl chloride monomer weekly on an FOB US Gulf Coast basis, which reflect the prevailing market value at 1:30 pm CT every Tuesday.

Contract price: Domestic VCM assessments reflect monthly contract prices for delivered product.

Specifications: EDC: 99.8% purity, maximum water content of 100 ppm. VCM: 99.9% purity.

Purified Terephthalic Acid

Contract prices: Platts publishes purified terephthalic acid (PTA) industry-settled monthly contract prices. Prices typically settle retroactively.

Contract prices reflect negotiated prices for contractual volumes.

Specifications: Fiber-grade PTA with a minimum purity of 99.6%.

US HYDROCARBON SOLVENTS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV
Solvent toluene and xylenes												
Solvent Toluene FOB USG	CTS (USD)	AAHRU00	AAHRV00		Spot	FOB	USG	3-30 days forward	47,000		LB	
Solvent Toluene FOB Chicago	CTS (USD)	AAHRW00	AAHRX00		Spot	FOB	Chicago	3-30 days forward	47,000		LB	
Solvent Xylene FOB USG	CTS (USD)	AAHRY00	AAHRZ00		Spot	FOB	USG	3-30 days forward	47,000		LB	
Solvent Xylene FOB Chicago	CTS (USD)	AAHSA00	AAHSB00		Spot	FOB	Chicago	3-30 days forward	47,000		LB	
Hexane												
Hexane G-P FOB USG cts/lb Weekly	CTS (USD)	AANTM00	AANTM03		Spot	FOB	USG	3-30 days forward	55 MT truck, 90 railcar		LB	
Hexane G-P DER Ex-tank cts/gal Weekly	CTS (USD)	AANTN00	AANTN03		Contract	FD	DER	Monthly	55 MT truck, 90 railcar		GAL	
Hexane G-P DER Ex-tank cts/lb Weekly	CTS (USD)	AANTO00	AANTO03		Contract	FD	DER	Monthly	55 MT truck, 90 railcar		LB	

US hydrocarbon solvents

Solvent Toluene and Xylenes

Assessment Frequency: Platts publishes weekly spot solvent toluene and xylene assessments, which reflect the prevailing market price at 1:30 pm CT each Tuesday.

Basis: Assessments reflect deals from rack to distributors via truck or rail, 3-30 days forward from publication on an FOB US Gulf Coast and FOB Chicago basis.

Specifications: Assessments reflect solvent-grade mixed xylenes that conform to ASTM D-843 and nitration-grade toluene that conforms to ASTM D-841, minimum purity of 99.7%.

Hexane

Assessment Frequency: Platts publishes weekly spot hexane assessments, which reflect the prevailing market price at 1:30 pm CT each Tuesday.

Basis: Spot assessments reflects material loading 3-30 days forward from publication, basis FOB US Gulf Coast.

Contract price: Contract prices reflect negotiated prices between producers and distributors for contractual volumes.

Specifications: Minimum 60% n-hexane, fewer than 10 ppm benzene.

US CHLOR ALKALI

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV
Caustic Soda												
Caustic Soda Domestic CP \$/st	USD	AANTJ00			Contract	FOB US Plant	Domestic River Barge	Monthly	800	1000	Dry ST	
Caustic Soda Spot	USD	AANTH00	AANTH03		Spot	ex-Plant	Domestic Railcar	3-30 days forward	34	55	Dry ST	
Caustic Soda Weekly	USD	AANTI00	AANTI03		Spot	FOB USG	USG Sea Barge	3-30 days forward	650	1,300	Dry MT	
Chlorine												
Chlorine Domestic CP	USD	AANTL00			Contract	ex-Plant	Domestic Railcar	Monthly	85	95	Dry ST	

US chlor alkali

Caustic Soda

Assessment Frequency: Platts publishes weekly spot caustic soda assessments, which reflect the prevailing market price at 1:30 pm CT each Tuesday.

Timing: Spot export assessments reflect material loading 3-30 days forward from date of publication, basis ex-plant and FOB Houston.

Contract price: Contract prices reflect monthly negotiated prices between producers and distributors for contractual volumes and can be settled retroactively.

Specifications: 50% solution commercial grade (liquid): sodium hydroxide content: 49%-51%; sodium oxide content: 38%-40%; and salt: 1% (10,000 ppm).

Chlorine

Contract price: Contract prices reflect monthly negotiated prices between producers and distributors for contractual volumes and can be settled retroactively.

Specifications: Commercial-grade chlorine, with minimum 97% purity, maximum water content of 50 ppm.

US OXYGENATED SOLVENTS

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV
Isopropyl Alcohol												
IPA FOB USG weekly	USD	PHADD00	PHAYG03		Spot	FOB	USG	3-30 days forward	400	600	MT	
IPA DER US Domestic weekly	USD	PHADG00	PHAYH03		Contract	FD	DER	Monthly	44,000 LB truck/185,000 gal rail	45,000 LB truck/185,000 gal rail	MT	
Phenol												
Phenol FOB Weekly (Export)	USD	PHAGE00	PHAYK03		Spot	FOB	USG	3-30 days forward	500	1,000	MT	
Phenol DER Ex-Tank Weekly (Domestic)	USD	PHAGH00	PHAYL03		Contract	Ex-Tank	DER	Monthly	44,000 LB	45,000 LB	MT	
Acetone												
Acetone T1 FOB USG Weekly	CTS (USD)	PHADJ00	PHAYN03		Spot	FOB	USG	3-30 days forward	500	1,000	MT	
Acetone Contract (T2 DER US)	CTS (USD)	AAHYC00	AAHYD00		Contract	FD	USG	Monthly	44,000 LB	45,000 LB	MT	
Ethyl acetate												
Ethyl acetate FOB USG Weekly	USD	PHAEC00	PHAYZ03		Spot	FOB	USG	3-30 days forward	250	500	MT	
Ethyl acetate DER US Domestic weekly	USD	PHAEF00	PHAZC03		Contract	FD	DER	Monthly	44,000 LB	45,000 LB	MT	
N-butyl acetate												
Butyl Acetate FOB USG Weekly	USD	PHAEI00	PHAZF03		Spot	FOB	USG	3-30 days forward	250	500	MT	
Butyl acetate DER US Domestic Weekly	USD	PHAEL00	PHAZG03		Contract	FD	DER	Monthly	44,000 LB	45,000 LB	MT	
Industrial grade Ethanol												
Industrial Ethanol 190 FOB DSP cts/gal weekly	CTS (USD)	AANTP00	AANTP03		Contract	FOB	DSP	Monthly	6,500		GAL	
Industrial Ethanol 200 FOB DSP cts/gal weekly	CTS (USD)	AANTR00	AANTR03		Contract	FOB	DSP	Monthly	6,500		GAL	

US oxygenated solvents

Isopropyl Alcohol

Assessment Frequency: Platts publishes weekly spot isopropyl alcohol assessments, which reflect the prevailing market value at 1:30 pm CT each Tuesday.

Timing: US export assessments reflect material loading 3-30 days forward from the date of publication basis FOB US Gulf Coast.

Contract price: Contract prices reflect monthly negotiated prices between producers and distributors for contractual volumes before discounts on a delivered basis for in the Eastern United States.

Specifications: Maximum 100 ppm aromatics content, maximum sulphur content of 1 ppm and minimum product purity of 50%. Minimum alcohol content is 99.5%; maximum water content is 0.3%.

Phenol

Assessment Frequency: Platts publishes weekly spot phenol assessments, which reflect the prevailing market value at 1:30 pm CT each Tuesday.

Timing: US export assessments reflect material loading 3-30 days forward from the date of publication on an FOB US Gulf Coast basis.

Contract price: Domestic contract prices reflect monthly

negotiated prices between producers and distributors on an ex-tank basis for material delivered in the Eastern United States.

Specifications: Minimum purity of 99.9%; maximum water content of 0.08%.

Acetone

Assessment Frequency: Platts publishes weekly spot acetone assessments, which reflect the prevailing market value at 1:30 pm CT each Tuesday.

Timing: US export assessments reflect material loading 3-30 days forward from the date of publication on an FOB US Gulf Coasts basis.

Contract price: Domestic assessments are on a truck/rail basis US Gulf Coast. Contract prices reflect monthly negotiated prices between producers and distributors for contractual volumes.

Specifications: Minimum acetone content of 99%; maximum water content of 0.35%.

Ethyl Acetate

Assessment Frequency: Platts publishes weekly spot ethyl acetate assessments, which reflect the prevailing market value

at 1:30 pm CT each Tuesday.

Timing: US export assessments reflect material loading 3-30 days forward from the date of publication, basis FOB US Gulf Coast.

Contract price: Contract prices reflect monthly negotiated prices between producers and distributors for contractual volumes, basis truck or rail delivery East of the Rockies (DER).

Specifications: Minimum purity of 99.5%, with an evaporation rate of 1.0, a maximum alcohol content of 0.5%, and a maximum water content of 0.05%.

N-Butyl Acetate

Assessment Frequency: Platts publishes weekly spot n-butyl acetate assessments, which reflect the prevailing market value at 1:30 pm CT each Tuesday.

Timing: US export assessments reflect material loading 3-30 days forward from the date of publication, basis FOB US Gulf Coast.

Contract price: Contract prices reflect monthly negotiated prices between producers and distributors for contractual volumes on

a truck/rail basis, for material delivered in the Eastern United States.

Specifications: Minimum purity of 99.5%, an evaporation rate of 1.0, a maximum alcohol content of 0.5%, and a maximum water content of 0.05%.

Industrial Grade Ethanol

Assessment Frequency: Platts publishes monthly industrial-grade ethanol contract prices on a weekly basis, which reflect the prevailing market value at 1:30 pm CT each Tuesday. Weekly postings reflect negotiations between producers and buyers and can evolve during the course of the delivery period.

Contract Price: Denatured, 190 Proof ethanol and denatured 200 Proof ethanol prices are posted basis FOB DSP (distilled spirits plant) producer-to distributor, in cts/gal.

Product specifications: Denatured 190 proof ethanol: 95% pure ethanol, mixed with another solvent (such as MIBK or acetone). Denatured 200 proof ethanol: 100% pure ethanol, mixed with another solvent.

Liquid and gas chemical freight

Platts assesses freight rates for liquid chemicals and gas chemicals in the Americas. Please refer to the Freight methodology and specifications guide for details of these assessments: https://www.spglobal.com/platts/plattscontent/_assets/_files/en/our-methodology/methodology-specifications/freight-methodology.pdf.

GLOBAL PETROCHEMICAL INDICES

Assessment	CURRENCY	CODE	Mavg	Wavg	TYPE	BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV
Global Propylene Index	USD	AAXV000									MT	
Global Benzene Index	USD	AAXVP00									MT	
Global Toluene Index	USD	AAXVQ00									MT	
Global PX Index	USD	AAXVU00									MT	
Global LDPE Index	USD	AAXVR00									MT	
Global PP Homopolymer Index	USD	AAXVS00									MT	
Global Ethylene Index	USD	AAXVN00									MT	
Global Petrochemical Index	USD	AAXVT00									MT	

Global petrochemical indices

Platts publishes on a daily basis the following petrochemical indices, which are based on the assessments indicated in parentheses. The indices appear in Platts Petrochemical Alert (PCA) page 900.

- Global Ethylene (CFR NE Asia, FD NWE, FD USG)
- Global Propylene (FOB Korea, FD NWE, FD USG)
- Global Benzene (FOB Korea, CIF ARA, FOB USG)
- Global Toluene (FOB Korea, FOB Rotterdam, FOB USG)
- Global Paraxylene (FOB Korea, FOB Rotterdam, and FOB US Gulf)
- Global Low density polyethylene (CFR N Asia, FD NWE, FAS Houston)

- Global Polypropylene homopolymer (CFR N Asia, FD NWE, FAS Houston)
- Global Petrochemical Index (PGPI) (1)

Weighted averages for each index above by region are as follows:

- Global Ethylene (CFR NE Asia, FD NWE, FD USG), 0.48 Asia, 0.24 for US and 0.28 for Europe.
- Global Propylene (FOB Korea, FD NWE, FD USG), 0.63 Asia, 0.19 for US and 0.17 for Europe.
- Global Benzene (FOB Korea, CIF ARA, FOB USG), 0.67 Asia, 0.13 for US and 0.19 for Europe.
- Global Toluene (FOB Korea, FOB Rotterdam, FOB USG), 0.49 Asia, 0.30 for US and 0.21 for Europe.

- Global Paraxylene (FOB Korea, FOB Rotterdam, and FOB US Gulf), 0.85 Asia, 0.09 for US and 0.06 for Europe.

- Global Low density polyethylene (CFR N Asia, FD NWE, FAS Houston), 0.37 Asia, 0.19 for US and 0.44 for Europe.

- Global Polypropylene homopolymer (CFR N Asia, FD NWE, FAS Houston), 0.64 Asia, 0.14 for US and 0.22 for Europe.

The distribution reflects the relative sizes of the regional markets based on production capacity, as of 2015.

(1) The S&P Global Platts Global Petrochemical Index (PGPI) is calculated based on the individual global product indices with the following weight distribution: 0.32 ethylene, 0.24 propylene, 0.11 benzene, 0.05 toluene, 0.10 paraxylene, 0.05 LDPE, and 0.14 PP.

Units: USD/mt.

REVISION HISTORY

December 2019: Removed references to discontinued spot chlorine assessment. Updated US Gulf Coast ethylene assessment to reflect Mont Belvieu basis.

July 2019: Platts completed an annual review of the Americas Petrochemicals methodology and specifications guide. Platts reviewed all content and corrected typos, as well as discrepancies between the text and the tables. Platts completed an annual update to sections 1 to 6 of Platts Methodology and Specifications Guides in April 2019, and moved these sections into a standalone Methodology Guide. The guide was updated to include additional details about MTBE laycans and nominations procedures as well as new US Styrene assessments now published in \$/MT. Extraneous language was removed throughout, and language was simplified for clarity.

December 2018: Platts updated this guide to reflect the transfer of chemical freight methodology from this guide to the global Freight methodology and specifications guide.

April 2018: [Annual Review] Added revised parts I-V1. General typographical changes, deletions of repeated text. Removed language related to normalization already included in parts I-VI.

April 2018: S&P Global Platts moved assessments of US EDC and VCM markets to Tuesday.

November 2017: Add new assessments for domestic Argentina, Colombia HDPE, LDPE and LLDPE prices and domestic Mexico HDPE film prices. Updated volumes sizes for domestic Brazil and Mexico polyethylene assessments.

April 2017: [Annual Review] Added specifications for LLDPE C6 and metallocene export assessments. Updated cracker margins methodology to reflect name change of Fuel Oil No. 6 3% USGC Waterborne to USGC HSFO. Updated MTBE methodology to address eWindow and clarify assessment process. MEG fiber-

grade monthly settlement added to reflect current practice. Clarified that MX methodology to state that ASTM 843 bids, offers and deals are normalized to ASTM 5211 spec.

November 2016: S&P Global Platts updated this guide to reflect new assessments for domestic Brazil HDPE, LDPE and LLDPE prices.

September 2016: [Annual Review] S&P Global Platts updated this guide to reflect the change to CFR West Coast South America for some Latin American polymer assessments. Add new assessments for domestic Mexico HDPE, LDPE and LLDPE prices. Changes all company references to S&P Global Platts. General edits for style and grammar throughout guide.

August 2016: S&P Global Platts updated this guide to reflect changes to the Market on Close time to 4 p.m. US CT for benzene, styrene, cumene and ethylene markets and to 1:30 p.m. US CT for all other markets. S&P Global Platts updated this guide to reflect the change in minimum spot cargo size for styrene monomer to 3,000mt.

March 2016: S&P Global Platts revised the individual regional weighting to each product based on their regional capacity, for the Global Petrochemical Indices.

March 2016: S&P Global Platts updated this guide to reflect the discontinuation of the posted ethylene contract price assessment and weekly spot chemical-grade propylene assessment; a clarification to the MX methodology and updates codes and timing for MX and styrene monomer.

October 2015: S&P Global Platts updated this guide to reflect new assessments for DOTP and DINP, a clarification to the OX methodology, clarifications to the US HDPE blowmolding export page codes and removing a reference in the MX methodology to a previously discontinued contract price.

September 2015: S&P Global Platts updated this guide to reflect

the discontinuation of dioctyl phthalate, methyl ethyl ketone and methyl isobutyl ketone. The guide was also updated with additional information on the paraxylene assessment. The guide was also updated to improve uniformity in language and correct typographical errors.

August 2015: S&P Global Platts updated this guide to reflect new assessments for LLDPE C6 and metallocene. The guide was also updated to improve uniformity in language and correct typographical errors. The conversion factor for the cracker margins was corrected to reflect the factor to two decimal places.

July 2015: S&P Global Platts updated this guide to reflect timing basis changes for US methanol FOB USG and polymer-grade propylene FD USG.

April 2015: S&P Global Platts updated this guide to reflect a specifications change for the FOB USG MTBE assessment and to reflect the correct code for IPA DER US domestic weekly assessments.

October 2014: S&P Global Platts updated this guide to reflect a clarification in the methodology for the FOB USG cumene assessment.

September 2014: S&P Global Platts updated this guide to reflect a timing change for S&P Global Platts spot ethylene assessments.

August 2014: S&P Global Platts revamped all Petrochemical Methodology And Specifications Guides, including its Americas Petrochemical guide, in August 2014. This revamp was completed to enhance the clarity and usefulness of all guides, and to introduce greater consistency of layout and structure across all published methodology guides. Methodologies for market coverage were not changed through this revamp, unless specifically noted in the methodology guide itself.