

# Specifications guide

## European petrochemicals

Latest update: May 2019

<b>Definitions of the trading locations for which Platts publishes daily indexes or assessments</b>	<b>2</b>
Olefins	4
Aromatics and methanol	8
Gasoline components	10
Polymers	17
Intermediates	22
Solvents	24
Chlor Alkali	25
Liquid (easy) and gas chemicals freight	26
Platts global petrochemical indices	26
<b>Appendix</b>	<b>27</b>
TDI-grade toluene specifications	27
MX specifications	27
<b>Revision history</b>	<b>28</b>

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

The following specifications guide contains the primary specifications and methodologies for Platts petrochemical assessments throughout Europe and Africa. 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](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 guide 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	Contract type	Contract basis	Location	Delivery period	Min size	Max size	UOM	Conv	PC Page		
													Code	Mavg	Wavg
<b>Ethylene, Propylene</b>															
Ethylene CIF Med Weekly	USD	PHAJC00	PHBCZ03		Spot	CIF	Mediterranean	3-30 days forward	1000		MT		PC0236		
Ethylene CIF Med Weekly M1	USD	HPBJD04	HPBJD03		Spot	CIF	Mediterranean	Current month	1000		MT		PC300		
Ethylene CIF Med Weekly M2	USD	HPBJE04	HPBJE03		Spot	CIF	Mediterranean	Next month	1000		MT		PC300		
Ethylene CIF NWE	USD	PHAJD00	PHBCY03	PHAJD03	Spot	CIF	NWE	3-30 days forward	1000		MT		PC543	PC0236	
Ethylene CIF NWE M1	USD	HPBJF00	HPBJF03	HPBJF04	Spot	CIF	NWE	Current month	1000		MT		PC543		
Ethylene CIF NWE M2	USD	HPBJG00	HPBJG03	HPBJG04	Spot	CIF	NWE	Next month	1000		MT		PC543		
Ethylene FD NWE	EUR	HPAJE00	HPBCX03	HPAJE03	Spot	FD	NWE	3-30 days forward	100		MT		PC0236	PC0236	
Ethylene FD NWE M1	EUR	HPBII00	HPBII03	HPBII04	Spot	FD	NWE	Current month	100		MT		PC543		
Ethylene FD NWE M2	EUR	HPBII00	HPBII03	HPBII04	Spot	FD	NWE	Next month	100		MT		PC543		
Ethylene FD NWE	USD	HPAJE10	HPAJE13	HPAJE14	Spot	FD	NWE	3-30 days forward	100		MT		PC0300	PC0300	
Ethylene FD NWE CP*	EUR	AAUDC00			Contract	FD	NWE	Current month			MT		PC0236		
Ethylene FD NWE CP*	USD	AAUDC10			Contract	FD	NWE	Current month			MT		PC0300		
Ethylene CP* Indicator	EUR	HPBJH00	HPBJH03		Contract	FD	NWE	Next month					PC543		
Propylene CP* Indicator	EUR	HPBJO00	HPBJO03		Contract	FD	NWE	Next month					PC543		
Poly grade propylene FD NWE	EUR	HPAJQ00	HPBCA03	HPAJQ01	Spot	FD	NWE	3-30 days forward	100		MT		PC543	PC0237	
Poly grade propylene FD NWE M1	EUR	HPBJM00	HPBJM03	HPBJM04	Spot	FD	NWE	Current month	100		MT		PC543		
Poly grade propylene FD NWE M2	EUR	HPBJN00	HPBJN03	HPBJN04	Spot	FD	NWE	Next month	100		MT		PC543		
Poly grade propylene FD NWE	USD	HPAJQ10	HPAJQ13	HPAJQ14	Spot	FD	NWE	3-30 days forward	100		MT		PC0308	PC0308	
Poly grade propylene CIF NWE	EUR	HPAJP00	HPBCB03	HPAJP01	Spot	CIF	NWE	3-30 days forward	1000		MT		PC543	PC0237	
Poly grade propylene CIF NWE M1	EUR	HPBJK00	HPBJK03	HPBJK04	Spot	CIF	NWE	Current month	100		MT		PC543		
Poly grade propylene CIF NWE M2	EUR	HPBJL00	HPBJL03	HPBJL04	Spot	CIF	NWE	Next month	100		MT		PC543		
Poly grade propylene CIF NWE	USD	HPAJP10	HPAJP13	HPAJP14	Spot	CIF	NWE	3-30 days forward	1000		MT		PC0308	PC0308	
Chem grade propylene FD NWE Weekly	EUR	HPAJZ00	HPBCM03		Spot	FD	NWE	3-30 days forward	100		MT		PC0237		
Chem grade propylene FD NWE Weekly M1	EUR	HPBJP04	HPBJP03		Spot	FD	NWE	Current month	100		MT		PC0308		

## OLEFINS

Assessment	Currency	Code	Mavg	Wavg	Contract type	Contract basis	Location	Delivery period	Min size	Max size	UOM	Conv	PC Page		
													Code	Mavg	Wavg
Chem grade propylene FD NWE Weekly M2	EUR	HPBJC04	HPBJC03		Spot	FD	NWE	Next month	100		MT		PC0308		
Chem grade propylene CIF NWE Weekly	EUR	HPAJY00	HPBCN03		Spot	CIF	NWE	3-30 days forward	1000		MT		PC0237		
Chem grade propylene CIF NWE Weekly M1	EUR	HPBJA04	HPBJA03		Spot	CIF	NWE	Current month	1000		MT		PC0308		
Chem grade propylene CIF NWE Weekly M2	EUR	HPBJB04	HPBJB03		Spot	CIF	NWE	Next month	1000		MT		PC0308		
Poly grade propylene FD NWE CP*	EUR	AAPST00			Contract	FD	NWE	Current month			MT		PC0237		
Poly grade propylene FD NWE CP*	USD	AAPST10			Contract	FD	NWE	Current month			MT		PC0308		
Butadiene FOB Rotterdam	USD	PHAKG00	PHBCR03	PHAKG04	Spot	FOB	NWE	3-30 days forward	1000		MT		PC519		PC0312
Butadiene FD NWE	EUR	HPAKF00	HPBCQ03	HPAKF04	Spot	FD	NWE	3-30 days forward	100		MT		PC519		PC0312
Butadiene FD NWE	USD	HPAKF10	HPAKF13	HPAKF14	Spot	FD	NWE	3-30 days forward	100		MT		PC519		PC0312
Butadiene FD NWE CP*	EUR	AAXOJ00			Contract	FD	NWE	Current month			MT		PC519		
Butadiene FD NWE CP*	USD	AAXOJ10			Contract	FD	NWE	Current month			MT		PC0312		
Crude C4 Weekly	USD	AAVOS00	AAVOS03		Spot	CIF	NWE	3-30 days forward	1000		MT		PC0461		
Crude C4 Factor Weekly		AAVOS02						3-30 days forward			MT		PC0461		

## Glycols

MEG CIF NWE T2 Weekly	EUR	AAUWV00	AAUWV03		Spot	CIF	NWE	3-30 days forward	1000		MT		PC0236		
MEG CIF NWE T2 Weekly	USD	PHAJL00	PHBDE03		Spot	CIF	NWE	3-30 days forward	1000		MT		PC0236		
MEG FCA NWE	USD	AAUWW10	AAUWW13		Spot	FCA	NWE	3-30 days forward	100		MT		PC0304		
MEG FCA NWE	EUR	AAUWW00	AAUWW03		Spot	FCA	NWE	3-30 days forward	100		MT		PC0236		
MEG FD NWE T2 Weekly	EUR	HPAJK00	HPBDD03		Spot	FD	NWE	3-30 days forward	100		MT		PC0236		
MEG FD NWE T2 Weekly	USD	HPAJK10	HPAJK13		Spot	FD	NWE	3-30 days forward	100		MT		PC0304		
MEG FD NWE CP*	EUR	HPAJM00	HPBDF03		Contract	FD	NWE	Current month			MT		PC0236		
MEG FD NWE CP*	USD	HPAJM10	HPAJM13		Contract	FD	NWE	Current month			MT		PC0304		
DEG FCA NWE Weekly	EUR	AAXCX00	AAXCX03		Spot	FCA	NWE	3-30 days forward	24	50	MT		PC0236		
DEG FD NWE Weekly	EUR	AAXCY00	AAXCY03		Spot	FD	NWE	3-30 days forward	24	50	MT		PC0236		

## Cracker Margins

Platts Petrochemical Cracker Margin (Spot Price)	USD	AAXOI00			Spot								PC543		
Platts Petrochemical Cracker Margin (Spot Price)	EUR	AAYDE00			Spot								PC543		
Platts Petrochemical Cracker Margin (CP*)	USD	AAYDF00			Contract								PC543		
Platts Petrochemical Cracker Margin (CP*)	EUR	AAYDG00			Contract								PC543		

\*CP = industry-settled contract price.

## Olefins

**Assessment Window:** Assessments are based on the latest information sourced from the market up to the close of the assessment window at 4:30 pm London time each day for daily assessments and 4:30 pm London time Friday or last working day of the week in case of holidays for weekly assessments.

**Timing:** Platts assesses ethylene, propylene, butadiene, MEG, DEG and crude C4s for delivery within a rolling 3-30 day window from the date of publication. Platts also publishes assessments for delivery of ethylene and propylene within the current month (M1) and next month (M2). M1 and M2 assessments are based on material trading for loading/delivery any time during the specified month and roll on the first of the month. Prompt trades, product delivered within 48 hours of publication date, are recorded for information purposes but are not considered in the assessment process because of the possibility of price distortion.

For all daily assessments Platts also publishes weekly averages on the last working day of the week.

### Ethylene

**Basis and Locations:** Spot prices are published daily in Eur/mt and \$/mt FD NWE and in \$/mt CIF NWE. CIF Med prices are assessed weekly in \$/mt and reflect deliveries in the Western Mediterranean ports, including those on the West Coast of Italy and southern France.

Additionally, Platts publishes an industry-settled monthly contract price in Eur/mt FD NWE. The monthly contract price is updated at the start of the settlement month, once Platts has information that two independent buyers and two independent sellers have agreed the same price. In the event that there is more than one price settlement, Platts generally publishes an average of these price settlements, as per industry convention. If a full settlement is not reached, Platts will not publish a monthly contract price.

**Mode of Transport:** Pipeline, truck or railcars for FD assessments. Vessel for CIF assessments.

**Standard Cargo Size:** For bulk assessments (CIF), at least 1,000mt. For inland assessments (FD) at least 100mt.

**Product Specifications:** Minimum purity of 99.9%.

### Propylene

**Basis and Locations:** Spot prices are published in Eur/mt FD NWE and CIF NWE daily for polymer grade and weekly for chemical grade.

Additionally, Platts publishes an industry-settled monthly contract price in Eur/mt FD NWE. The monthly contract price is updated at the start of the settlement month, once Platts has information that two independent buyers and two independent sellers have agreed the same price. In the event that there is more than one price settlement, Platts generally publishes an average of these price settlements, as per industry convention. If a full settlement is not reached, Platts will not publish a monthly contract price.

**Mode of Transport:** Pipeline, truck or railcars for FD assessments. Vessel for CIF assessments.

**Standard Cargo Size:** For bulk assessments (CIF), at least 1,000mt. For inland assessments (FD) at least 100mt.

**Product Specifications:** Polymer grade - minimum purity of 99.5%. Chemical grade - minimum purity of 94%.

### Ethylene/Propylene Indicators

Platts Ethylene and Propylene Indicators are published daily and reflect calculated or industry-settled gross contract prices for the month ahead in Eur/mt on a FD NWE basis. Platts uses a rolling regression model to calculate the contract price in the

absence of confirmed settlements. The month rolls on the first of each month.

The independent variables used in the rolling regression model are the differences between the latest 10-day averages and the 10-day averages since the last settlement for four published daily prices. The independent variables are:

- Platts month-ahead ethylene spot price;
- Platts month-ahead propylene spot price;
- Platts naphtha M1 swap price;
- Platts benzene CIF ARA M2 price.

### Platts Petrochemical Cracker Margin

Platts Petrochemicals Cracker Margin (PCM) spot and contract calculations are published daily in \$/mt and in Eur/mt. The PCM aims to provide a basic calculation of the petrochemicals margins of steam cracker operators in Europe.

The variables used in the calculation of the spot PCM include:

- Platts naphtha CIF NWE cargoes;
- Ethylene FD NWE (3-30 days forward, converted to US dollar);
- Propylene FD NWE (3-30 days forward, converted to US dollar);
- Butadiene FD NWE (3-30 days forward, converted to US dollar);
- Benzene CIF ARA (5-30 days forward);
- Gasoline 10 ppm FOB Rotterdam barge;
- Low-sulfur fuel oil 1% CIF NWE.

The variables used in the calculation of the contract PCM include ethylene, propylene, benzene and butadiene monthly contract prices and cumulative monthly averages of the respective feedstocks.

The euro-dollar exchange rate (BCADD00) is published on PCA106.

The PCM spot formula is as follows:

$$\text{PCM} = 0.96 * \text{Ethylene FD NWE} + 0.54 * \text{Propylene FD NWE} + 0.19 * \text{Benzene CIF ARA} + 0.17 * \text{Butadiene FD NWE} + 0.55 * \text{Gasoline 10 ppm FOB Rdam barge} + (-0.0935 * \text{LSFO 1\% CIF NWE}) + (-3.13 * \text{Naphtha CIF NWE cargo}).$$

### Butadiene

**Basis and Locations:** Spot prices are published daily in Eur/mt FD NWE and in \$/mt FOB Rotterdam.

Additionally, Platts publishes an industry-settled monthly contract price in Eur/mt FD NWE. The monthly contract price is updated at the start of the settlement month, once Platts has information that two independent buyers and two independent sellers have agreed the same price. In the event that there is more than one price settlement, Platts generally publishes an average of these price settlements, as per industry convention. If a full settlement is not reached, Platts will not publish a monthly

contract price.

**Mode of Transport:** Pipeline, truck or railcars for FD assessments. Vessel for FOB assessments.

**Standard Cargo Size:** For bulk assessments (FOB), at least 1,000mt. For distribution assessments (FD) at least 100mt.

**Product Specifications:** Minimum purity of 99.5%.

### Crude C4s

**Basis and Locations:** Spot prices are assessed weekly in \$/mt CIF NWE.

**Standard Cargo Size:** At least 1,000mt.

**Product Specifications:** Typical contents of 43% butadiene and 25% isobutylene.

**Crude C4s factor:** The factor to naphtha expresses the ratio between the weekly crude C4s assessments and the CIF ARA physical naphtha assessment [PAAAL00] on the same day.

### Monoethylene Glycol (MEG)

**Basis and Locations:** Spot prices are published weekly in Eur/mt and \$/mt FD NWE, Free Carrier NWE and CIF NWE. FD NWE

assessments reflect delivery to consumers in Germany, the UK, northern France, Belgium and the Netherlands. Assessments are for T2 product, i.e. duty paid for European-qualified material.

Additionally, Platts publishes an industry-settled monthly contract price in Eur/mt FD NWE. The monthly contract price is updated when available, once Platts has information that two independent buyers and two independent sellers have agreed the same price. In the event that there is more than one price settlement, Platts generally publishes an average of these price settlements, as per industry convention. If a full settlement is not reached, Platts will not publish a monthly contract price.

**Standard Cargo Size:** For bulk assessments (CIF) at least 1,000mt. For distribution assessments (FD) at least 100mt.

**Product Specifications:** Minimum purity of 99.9%.

### Diethylene Glycol (DEG)

**Basis and Locations:** Spot prices are published weekly in Eur/mt FD NWE and FCA NWE. All assessments are duty paid or T2.

**Standard Cargo Size:** 24-50 mt.

**Product Specifications:** Minimum purity of 99.5%.

## AROMATICS AND METHANOL

Assessment	Currency	Code	Mavg	Wavg	Contract type	Contract basis	Location	Delivery period	Min size	Max size	UOM	Conv	PC Page			
													Code	Mavg	Wavg	
<b>Benzene</b>																
Benzene CIF ARA	USD	AA0AX00	AA0AX03	AA0AX05	Spot	CIF	ARA	5-30 days forward	1000	1000	MT		PC0317	PC0432	PC0320	
Benzene FOB Rotterdam	USD	PHAAJ00	PHBFJ03	PHAVP04	Spot	FOB	Rotterdam	5-30 days forward	1000	1000	MT		PC0317	PC0432	PC0320	
Benzene CIF ARA Mo01	USD	AA0QQ00	AA0QQ03	AA0QQ05	Spot	CIF	ARA	within the current month or the next calendar month if assessment date falls in the last five working days of the month	1000	1000	MT		PC0317	PC0432	PC0320	
Benzene CIF ARA Mo02	USD	AA0QR00	AA0QR03	AA0QR05	Forward	CIF	ARA	within the 2nd month or within the 3rd month if assessment date falls in the last five working days of the month	1000	1000	MT		PC0317	PC0432	PC0320	
Benzene CIF ARA Mo03	USD	AAIBH00	AAIBG00	-	Forward	CIF	ARA	within the 3rd month or within the 4th month if assessment date falls in the last five working days of the month	1000	1000	MT		PC0060			
Benzene CIF ARA Mo04	USD	AAIBJ00	AAIBI00	-	Forward	CIF	ARA	within the 4th month or within the 5th month if assessment date falls in the last five working days of the month	1000	1000	MT		PC0060			
Benzene CIF ARA Mo05	USD	AAIBL00	AAIBK00	-	Forward	CIF	ARA	within the 5th month or within the 6th month if assessment date falls in the last five working days of the month	1000	1000	MT		PC0060			
Benzene CIF ARA CP*	USD	AAPZE00	-	-	Contract	CIF	ARA	Current month			MT		PC0317			
Benzene CIF ARA CP*	EUR	AAKJB00	-	-	Contract	CIF	ARA	Current month			MT		PC0317			
Benzene CIF ARA CP* indicator	USD	HPBJQ00			Contract	CIF	ARA	Next month			MT		PC0318			
<b>Toluene</b>																
Toluene CIF ARA	USD	TLEAA00	TLEAA03	TLEAA04	Spot	CIF	ARA	5-30 days forward	1000		MT		PC0377	PC0432	PC0324	
Toluene CIF ARA Mo01	USD	TLEAB00	TLEAB03	TLEAB04	Spot	CIF	ARA	within the current month or the next calendar month if assessment date falls in the last five working days of the month	1000		MT		PC0377	PC0432	PC0324	
Toluene CIF ARA Mo02	USD	TLEAC00	TLEAC03	TLEAC04	Forward	CIF	ARA	within the 2nd month or within the 3rd month if assessment date falls in the last five working days of the month	1000		MT		PC0377	PC0432	PC0324	
Toluene TDI FOB ARA	USD	AASFD00	AASFD03	AASFD04	Spot	FOB	ARA	5-30 days forward	1000	2000	MT		PC0377	PC0432	PC0324	
Toluene TDI FOB ARA Mo01	USD	AASFF00	AASFF03	AASFF04	Spot	FOB	ARA	within the current month or the next calendar month if assessment date falls in the last five working days of the month	1000	2000	MT		PC0377	PC0432	PC0324	
Toluene TDI FOB ARA Mo02	USD	AASFJ00	AASFJ03	AASFJ04	Forward	FOB	ARA	within the 2nd month or within the 3rd month if assessment date falls in the last five working days of the month	1000	2000	MT		PC0377	PC0432	PC0324	
Toluene CIF ARA Mo01 spread to EBOB FOB AR swap	USD	TLPRA00	TLPRA03	TLPRA04	Spot	CIF	ARA	within the current month or the next calendar month if assessment date falls in the last five working days of the month	1000		MT		PC0377	PC0432	PC0324	
Toluene CIF ARA Mo02 spread to EBOB FOB AR swap	USD	TLPRB00	TLPRB03	TLPRB04	Forward	CIF	ARA	within the 2nd month or within the 3rd month if assessment date falls in the last five working days of the month	1000		MT		PC0377	PC0432	PC0324	
<b>Paraxylene</b>																
Paraxylene FOB ARA	USD	AAILD00	AAIOR00	AAIVB00	Spot	FOB	ARA	5-30 days forward	1000	1000	MT		PC0375	PC0432	PC0444	
Paraxylene FOB ARA Mo01	USD	AASDB00	AASDB03	AASDB01	Spot	FOB	ARA	within the current month or the next calendar month if assessment date falls in the last five working days of the month	1000	1000	MT		PC0375	PC0432	PC0444	
Paraxylene FOB ARA Mo02	USD	AASDC00	AASDC03	AASDC01	Forward	FOB	ARA	within the 2nd month or within the 3rd month if assessment date falls in the last five working days of the month	1000	1000	MT		PC0375	PC0432	PC0444	
Paraxylene FD NWE CP*	EUR	AALHZ00			Contract	FD	NWE	Current month			MT		PC0375			
Paraxylene FD NWE CP*	USD	AALHZ10			Contract	FD	NWE	Current month			MT		PC0375			

## AROMATICS AND METHANOL

Assessment	Currency	Code	Mavg	Wavg	Contract type	Contract basis	Location	Delivery period	Min size	Max size	UOM	Conv	PC Page		
													Code	Mavg	Wavg
<b>Orthoxylene</b>															
Orthoxylene FOB ARA	USD	PHABK00	PHBFR03	PHABK04	Spot	FOB	ARA	5-30 days forward	1000	1000	MT		PC0332	PC0432	PC0444
Orthoxylene NWE CP*	EUR	HPABJ00	HPBFS03		Contract	FD	NWE	Current month			MT		PC0332		
Orthoxylene NWE CP*	USD	HPABJ10	HPABJ13		Contract	FD	NWE	Current month			MT		PC0332		
<b>Mixed Xylenes</b>															
Mixed Xylene CIF ARA	USD	MXEAA00	MXEAA03	MXEAA04	Spot	CIF	ARA	5-30 days forward	1000		MT		PC0328	PC0432	PC0444
Mixed Xylene CIF ARA Mo01	USD	MXEAB00	MXEAB03	MXEAB04	Spot	CIF	ARA	within the current month or the next calendar month if assessment date falls in the last five working days of the month	1000		MT		PC0328	PC0432	PC0444
Mixed Xylene CIF ARA Mo02	USD	MXEAC00	MXEAC03	MXEAC04	Forward	CIF	ARA	within the 2nd month or within the 3rd month if assessment date falls in the last five working days of the month	1000		MT		PC0328	PC0432	PC0444
Mixed Xylene FOB ARA	USD	PHABD00	PHBFQ03	PHABD04	Spot	FOB	ARA	5-30 days forward	1000	1000	MT		PC0328	PC0432	PC0444
Mixed Xylene CIF ARA Mo01 spread to EBOB FOB AR swap	USD	MXPRA00	MXPRA03	MXPRA04	Spot	CIF	ARA	within the current month or the next calendar month if assessment date falls in the last five working days of the month	1000		MT		PC0328	PC0432	PC0444
Mixed Xylene CIF ARA Mo02 spread to EBOB FOB AR swap	USD	MXPRB00	MXPRB03	MXPRB04	Forward	CIF	ARA	within the 2nd month or within the 3rd month if assessment date falls in the last five working days of the month	1000		MT		PC0328	PC0432	PC0444
<b>Styrene</b>															
Styrene FOB ARA	USD	AA0QP00	AA0QP03	AA0QP05	Spot	FOB	ARA	5-30 days forward	1000	1000	MT		PC0376	PC0444	PC0338
Styrene FOB ARA Mo01	USD	AAV0Q00	AAV0Q03	AAV0Q04	Spot	FOB	ARA	within the current month or the next calendar month if assessment date falls in the last five working days of the month	1000	1000	MT		PC0376	PC0444	PC0338
Styrene FOB ARA Mo02	USD	AAV0R00	AAV0R03	AAV0R04	Forward	FOB	ARA	within the 2nd month or within the 3rd month if assessment date falls in the last five working days of the month	1000	1000	MT		PC0376	PC0444	PC0338
<b>Methanol</b>															
Methanol T2 FOB Rotterdam	EUR	HPACQ00	HPBGB03	HPACQ01	Spot	FOB	Rotterdam	5-30 days forward	1000	1000	MT		PC1160	PC0444	PC0346
Methanol T2 FOB Rotterdam	USD	HPACQ10	HPACQ13	HPACQ14	Spot	FOB	Rotterdam	5-30 days forward	1000	1000	MT		PC1160		PC0346
Methanol Quarterly CP*	EUR	HPAC000	HPBGC03		Contract	FOB	Rotterdam	Current quarter			MT		PC1160		
Methanol Quarterly CP*	USD	HPAC010	HPAC013		Contract	FOB	Rotterdam	Current quarter			MT		PC1160		

\*CP = industry-settled contract price.

## Aromatics and methanol

**Assessment Window:** Assessments for Northwest Europe benzene, toluene, styrene, paraxylene, mixed xylenes, orthoxylene, and methanol are based on the latest information from the market up to the close of the daily assessment window at 4:30 pm London time.

**Timing:** Assessments for BTX, styrene, and methanol reflect material loading/for delivery in a rolling 5-30 day window from the date of publication. Benzene, toluene, styrene, paraxylene, orthoxylene, mixed xylenes and methanol are assessed daily. A weekly average of the daily assessments for these products is also published on an ARA and Rotterdam basis.

Platts publishes Europe benzene, toluene, mixed xylenes, paraxylene and styrene assessments for delivery within the current month (M1) and second month (M2). M1 and M2 assessments are based on material trading for loading/delivery any time during the specified month.

Platts also publishes assessments for benzene which reflect monthly forward physical delivery within the third (M3), fourth (M4) and fifth months (M5).

All assessments roll forward five London working days prior to the first working day of the next month. For example, in March 2018 the M1 price reflects material delivered any time in March. On March 23, the assessment laycan rolls and April becomes the prompt month (M1).

**Aromatics MOC window guidelines:** Platts publishes European aromatics bids and offers which reflect full calendar month, half-month and balance-of-the-month loading/delivery dates only, in line with standard market practice. Orders with loading/delivery dates stretching over more than one month are no longer considered due to their restrictive nature.

In CIF markets, Platts also accepts bids and offers for dated

parcels in no shorter than 10-day strips, which allows buyers greater certainty over dates. Participants should allow at least five clear calendar days nomination period. These guidelines are applicable to toluene, mixed xylenes, paraxylene, orthoxylene, benzene and styrene bids and offers in Europe. For applicable assessments, Platts reflects bids, offers and intentions to trade whereby the seller commits to provide a minimum 1,000 mt parcel delivered CIF ARA on a barge. The buyer should not unreasonably withhold the option for delivery on a larger vessel and the seller commits to demurrage and laytime commensurate to delivery of a 1,000 mt barge.

### Benzene

**Basis and Locations:** Spot prices are assessed daily in \$/mt FOB Rotterdam and CIF Amsterdam-Rotterdam-Antwerp and reflect T2 (duty paid for European-qualified) material.

The forward curve assessments, reflecting M2, M3, M4, M5, are in \$/mt CIF ARA.

Additionally, Platts publishes an industry-settled monthly contract price in Eur/mt and \$/mt CIF ARA. The \$/mt price is based on the European Central Bank euro daily reference rate of the day prior to the date of settlement to convert to dollars, as agreed between contract counterparties.

The monthly contract price is updated at the start of the settlement month, once Platts has obtained information that two independent buyers and two independent sellers have agreed the same price. In the event that there is more than one price settlement, Platts generally publishes an average of these price settlements, as per industry convention. If a full settlement is not reached, Platts will not publish a monthly contract price.

Platts Benzene CIF ARA CP Indicator is published daily and reflects calculated or industry-settled net contract prices for the month ahead. Platts uses a simple rolling five-day average of the assessment for benzene delivered in the month ahead

to calculate the front month contract price in the absence of confirmed settlements. Specifically, Platts uses the M2 CIF ARA benzene price [AAOQR00] in its calculations with the exception of the last five working days of the month when the contract price indicator is calculated on the basis of M1 CIF ARA benzene [AAOQQ00]. This reflects the time at which the M1 assessment rolls from the existing month to the following month.

**Standard Cargo Size:** 1,000mt.

**Product Specifications:** Product must conform to ASTM D-2359.

### Toluene

**Basis and Location:** Spot prices are assessed daily in \$/mt CIF Amsterdam-Rotterdam-Antwerp, and FOB Amsterdam-Rotterdam-Antwerp for TDI grade. All assessments reflect T2 (duty paid for European-qualified) material. FOB prices are assessed at parity with CIF values. Platts also publishes daily M1 and M2 CIF ARA spreads to corresponding Eurobob FOB AR gasoline swaps. The Eurobob FOB AR gasoline balance-of-month swap, ABWFB00, is used for the M1 CIF ARA toluene assessment calculation, up to and including the 15th of each month. From the 16th of each month, when ABWFB00 is no longer published, until 5 business days prior to month-end, Eurobob balance-of-month value for the purposes of Platts M1 toluene spread assessments is based on the forward-month Eurobob FOB AR barge gasoline swap [ABWFC00] and a time spread. The Eurobob FOB AR gasoline forward-month swap, ABWFC00, is used for the M2 CIF ARA toluene assessment.

**Standard Cargo Size:** For FOB ARA, 1,000-2,000mt. For CIF ARA, 1,000mt.

**Product Specifications:** Product must conform to D5606 latest edition, with a minimum purity of 99.9%.

(See appendix for full TDI-grade toluene specifications)



## Paraxylene

**Basis and Location:** Spot prices are assessed daily in \$/mt FOB Amsterdam-Rotterdam-Antwerp and reflect T2 (duty paid for European-qualified) material.

Additionally, Platts publishes an industry-settled monthly contract price in Eur/mt FD NWE. The monthly contract price is updated when available, once Platts has information that two independent buyers and two independent sellers have agreed the same price. In the event that there is more than one price settlement, Platts generally publishes an average of these price settlements, as per industry convention. If a full settlement is not reached, Platts will not publish a monthly contract price.

**Standard Cargo Size:** 1,000mt.

**Product Specifications:** Minimum purity of 99.7%.

## Orthoxylene

**Basis and Location:** Spot prices are assessed daily in \$/mt FOB Amsterdam-Rotterdam-Antwerp and reflect T2 (duty paid for European-qualified) material.

Additionally, Platts publishes an industry-settled monthly contract price in Eur/mt FD NWE. The monthly contract price is updated when available, once Platts has information that two independent buyers and two independent sellers have agreed the same price. In the event that there is more than one price settlement, Platts generally publishes an average of these price settlements, as per industry convention. If a full settlement is not reached, Platts will not publish a monthly contract price.

**Standard Cargo Size:** 1,000mt.

**Product Specifications:** Minimum purity of 98% and a maximum 0.3% non-aromatics content.

## Mixed Xylenes

**Basis and Location:** Spot prices are assessed daily in \$/mt CIF Amsterdam-Rotterdam-Antwerp and FOB Amsterdam-Rotterdam-Antwerp. All assessments reflect T2 (duty paid for European-qualified) material. FOB prices are assessed at parity with CIF values. Platts also publishes daily M1 and M2 CIF ARA spreads to corresponding Eurobob FOB AR gasoline swaps. The Eurobob FOB AR gasoline balance-of-month swap, ABWFB00, is used for the M1 CIF ARA MX assessment calculation, up to and including the 15th of each month. From the 16th of each month, when ABWFB00 is no longer published, until 5 business days prior to month-end, Eurobob balance-of-month value for the purposes of Platts M1 MX spread assessments is based on the forward-month Eurobob FOB AR barge gasoline swap [ABWFC00] and a time spread. The Eurobob FOB AR gasoline forward-month swap, ABWFC00, is used for the M2 CIF ARA MX assessment.

**Standard Cargo Size:** 1,000mt.

**Product Specifications:** Product conforming to the latest edition of ASTM D-843, with one or more isomers removed; the non-aromatics content set at the maximum of 2% and the maximum ethylbenzene content at 20%. There are no limits on metaxylene, paraxylene and orthoxylene content.

(See appendix for full MX specifications)

## Styrene

**Basis and Location:** Spot prices are assessed daily in \$/mt FOB Amsterdam-Rotterdam-Antwerp and reflect T2 (duty paid for European-qualified) material.

**Standard Cargo Size:** 1,000mt.

**Product Specification:** Product must conform to ASTM D-2827 latest edition, with a minimum purity of 99.7%.

## Methanol

**Basis and Location:** Spot prices are assessed daily in Eur/mt FOB Rotterdam and reflect T2 (duty paid for European-qualified) material.

Additionally, Platts publishes an industry-settled quarterly contract price in Eur/mt FOB Rotterdam. The quarterly contract price is updated at the start of the settlement quarter, once Platts has information that two independent buyers and two independent sellers have agreed the same price. In the event that there is more than one price settlement, Platts generally publishes an average of these price settlements, as per industry convention. If a full settlement is not reached, Platts will not publish a quarterly contract price.

**Standard Cargo Size:** 1,000mt.

**Product Specification:** Product must conform to the International Methanol Producers and Consumers Association (IMPCA) Reference Specification (<http://www.impca.be>).

## GASOLINE COMPONENTS

Assessment	CURRENCY	CODE	Mavg	Wavg	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CODE	PC Page	
													Mavg	Wavg
<b>MTBE</b>														
MTBE FOB ARA	USD	PHALA00	PHBFZ03	PHALA04	Spot	FOB	ARA	3-15 days or 5-15 days forward	1000	1000	MT	PC0318		PC0342
MTBE FOB ARA (cents/gal)	USD cents	AAWLE00			Spot	FOB	ARA	3-15 days or 5-15 days forward	3550	3550	Gal	PC0318		
MTBE FOB ARA factor		PHALA02	PHALA03	PHALA14	Spot	FOB	ARA					PC0318	PC0444	PC0342
<b>ETBE</b>														
ETBE FOB AR	USD	AASLQ00	AASLQ03	AASLQ01	Spot	FOB	AR	3-15 days or 5-15 days forward	1000	1000	MT	PB1420	PB1422	PB1011
ETBE Premium FOB AR	USD	AASLQ02	AASLQ13	AASLQ04	Spot	FOB	AR	3-15 days or 5-15 days forward	1000	1000	MT	PB1420		PB1011
<b>Raffinate - 1</b>														
Raffinate - 1 CIF NWE Weekly	USD	PHAFY00	PHBCU03		Spot	CIF	NWE	3-30 days forward	1000	1000	MT	PC0316		
Raffinate - 1 CIF NWE Factor Weekly		PHAFY02			Spot	CIF	NWE	3-30 days forward	1000	1000	MT	PC0316		

## Gasoline components

### MTBE

**Assessment Window:** Assessments are based on the latest information from the market up to the close of the daily assessment window at 4:30 pm London time. The MTBE Market-on-Close assessment process is facilitated through the eWindow technology. For further details please consult the Petrochemicals Timing and Increment Guidelines on [www.spglobal.com/platts](http://www.spglobal.com/platts).

**Timing:** MTBE assessments reflect material loading in a rolling 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward window from the date of publication.

**Basis and Location:** Spot prices are assessed daily in \$/mt FOB Amsterdam-Rotterdam-Antwerp and reflect T2 (duty paid for European-qualified) material.

**Standard cargo size:** 1,000mt.

**Product Specifications:** Minimum purity of 98%, maximum water content of 1,000 ppm and maximum methanol content of 1.5% of the total weight.

**MTBE factor:** The MTBE to gasoline factor expresses the ratio between daily MTBE assessments basis FOB ARA and the Eurobob FOB Rotterdam assessment [AAQZV00].

### ETBE

**Assessment Window:** Assessments are based on the latest information from the market up to the close of the daily assessment window at 4:30 pm London time.

**Timing:** ETBE assessments reflect material loading in a rolling 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward window from the date of publication.

**Basis and Locations:** Spot prices are assessed daily in \$/mt FOB Amsterdam-Rotterdam (FOB AR) and reflect T2 (duty paid for European-qualified) material.

**Standard cargo size:** 1,000mt.

**Product Specifications:** Minimum purity of 95%.

**Sustainability Criteria:** Platts only reflects bids, offers and expressions of interest to trade for product that satisfies the

sustainability criteria defined in article 17 of the Directive 2009/28/EC. Sellers must demonstrate compliance, and buyers hold a right to audit the sustainability documentation. For more details, refer to the appendix.

### Raffinate – 1

**Assessment Window:** Assessments are based on the latest information from the market up to the close of the assessment window at 4:30 pm London time Friday or last working day of the week in case of holidays.

**Timing:** Assessments reflect material loading 3-30 days forward from the day of publication.

**Basis and Locations:** Prices are in \$/mt CIF NWE.

**Standard cargo size:** Minimum 1,000mt.

**Product Specifications:** For product with a minimum isobutene content of 35%.

**Raffinate-1 factor:** The factor expresses the ratio between the assessment basis CIF NWE and CIF ARA physical naphtha [PAAAL00].

## POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE (mt)	MAX SIZE	UOM	PC Page			
												CODE	Mavg	Wavg	
<b>Polyethylene</b>															
HDPE B/Mldg CFR North Africa Weekly	USD	AAVWI00	AAVWS00		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	PC0239			
HDPE Blowmolding CFR West Africa	USD	ABAAI04	ABAAI03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	pc239			
HDPE B/Mldg CFR Russia Weekly	EUR	AAUMV00	AAUMV03		Spot	CFR	Russia	3-30 days forward			MT	PC0239			
HDPE B/Mldg CFR Turkey Weekly	USD	AAWX000	AAWX003		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239			
HDPE B/Mldg FCA Antwerp Spot Weekly	EUR	AAVKE00	AAVKE03		Spot	FCA	Northwest Europe	3-30 days forward	100		MT	PC0239			
HDPE B/Mldg FD Britain CP Weekly	GBP	PHAMI00	PHBEG03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE B/Mldg FD NWE CP Weekly	USD	PHAHH00	PHBBD03		Contract	FD	Northwest Europe	Current month			MT	PC0263			
HDPE B/Mldg FD NWE Spot Weekly	EUR	AALUF00	AALUG00		Spot	FD	Northwest Europe	3-30 days forward	100		MT	PC0239			
HDPE B/Mldg FOB NWE Weekly	USD	PHAHI00	PHBBE03		Spot	FOB	Northwest Europe	3-30 days forward	300		MT	PC0239			
HDPE B/Mldg FD France CP Weekly	EUR	HPAMH00	HPBEF03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE B/Mldg FD Germany CP Weekly	EUR	HPAME00	HPBEC03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE B/Mldg FD Holland CP Weekly	EUR	HPAMF00	HPBED03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE B/Mldg FD Italy CP Weekly	EUR	HPAMG00	HPBEE03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443		
HDPE B/Mldg FD Spain CP Weekly	EUR	HPAWE04	HPAWF03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443		
HDPE Film CFR North Africa Weekly	USD	AAVWH00	AAVWH03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	PC0239			
HDPE Film CFR West Africa Weekly	USD	ABAAK04	ABAAK03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	pc239			
HDPE Film CFR Russia Weekly	EUR	AAUMW00	AAUMW03		Spot	CFR	Russia	3-30 days forward			MT	PC0239			
HDPE Film CFR Turkey Weekly	USD	AAWXP00	AAWXP03		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239			
HDPE Film FCA Antwerp Spot Weekly	EUR	AAVKF00	AAVKF03		Spot	FCA	Northwest Europe	3-30 days forward	100		MT	PC0239			
HDPE Film FD Britain CP Weekly	GBP	PHAVL00	PHAVM03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE Film FD NWE CP Weekly	USD	PHAVD00	PHAVE03		Contract	FD	Northwest Europe	Current month			MT	PC0263			
HDPE Film FD NWE Spot Weekly	EUR	AALUH00	AALUI00		Spot	FD	Northwest Europe	3-30 days forward	100		MT	PC0239			
HDPE Film FOB NWE Weekly	USD	PHAVB00	PHAVC03		Spot	FOB	Northwest Europe	3-30 days forward	300		MT	PC0239			
HDPE Film FD France CP Weekly	EUR	HPAVN00	HPAVO03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE Film FD Germany CP Weekly	EUR	HPAVF00	HPAVG03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE Film FD Holland CP Weekly	EUR	HPAVH00	HPAVI03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE Film FD Italy CP Weekly	EUR	HPAVJ00	HPAVK03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443		
HDPE Film FD Spain CP Weekly	EUR	HPAWG04	HPAWH03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443		
HDPE HMW 2-5 FD Britain CP Weekly	GBP	AAVJV00	AAVJV03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE HMW 2-5 FD France CP Weekly	EUR	AAVJU00	AAVJU03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE HMW 2-5 FD Germany CP Weekly	EUR	AAVJR00	AAVJR03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE HMW 2-5 FD Holland CP Weekly	EUR	AAVJS00	AAVJS03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443		
HDPE HMW 2-5 FD Italy CP Weekly	EUR	AAVJW00	AAVJW03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443		
HDPE HMW 2-5 FD NWE CP Weekly	USD	AAVJT00	AAVJT03		Contract	FD	Northwest Europe	Current month			MT	PC0263			
HDPE HMW 2-5 FD Spain CP Weekly	EUR	AAVJZ00	AAVJZ03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443		

## POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE (mt)	MAX SIZE	UOM	PC Page		
												CODE	Mavg	Wavg
HDPE HMW 5-10 FD Britain CP Weekly	GBP	AAVPE00	AAVPE03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
HDPE HMW 5-10 FD France CP Weekly	EUR	AAVPD00	AAVPD03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
HDPE HMW 5-10 FD Germany CP Weekly	EUR	AAVPA00	AAVPA03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
HDPE HMW 5-10 FD Holland CP Weekly	EUR	AAVPB00	AAVPB03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
HDPE HMW 5-10 FD Italy CP Weekly	EUR	AAVPF00	AAVPF03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443	
HDPE HMW 5-10 FD NWE CP Weekly	USD	AAVPC00	AAVPC03		Contract	FD	Northwest Europe	Current month			MT	PC0263		
HDPE HMW 5-10 FD Spain CP Weekly	EUR	AAVPG00	AAVPG03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443	
HDPE Inj CFR North Africa Weekly	USD	AAVWG00	AAVWG03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	PC0239		
HDPE Injection CFR West Africa Weekly	USD	ABAAJ04	ABAAJ03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	pc239		
HDPE Inj CFR Russia Weekly	EUR	AAUMU00	AAUMU03		Spot	CFR	Russia	3-30 days forward			MT	PC0239		
HDPE Inj CFR Turkey Weekly	USD	AAWXN00	AAWXN03		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239		
HDPE Inj FCA Antwerp Spot Weekly	EUR	AAVKD00	AAVKD03		Spot	FCA	Northwest Europe	3-30 days forward	100		MT	PC0239		
HDPE Inj FD Britain CP Weekly	GBP	PHAMN00	PHBEB03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
HDPE Inj FD NWE CP Weekly	USD	PHAHL00	PHBAY03		Contract	FD	Northwest Europe	Current month			MT	PC0263		
HDPE Inj FD NWE Spot Weekly	EUR	AALUD00	AALUE00		Spot	FD	Northwest Europe	3-30 days forward	100		MT	PC0239		
HDPE Inj FOB NWE Weekly	USD	PHAHM00	PHBAZ03		Spot	FOB	Northwest Europe	3-30 days forward	300		MT	PC0239		
HDPE Inj FD France CP Weekly	EUR	HPAMM00	HPBEA03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
HDPE Inj FD Germany CP Weekly	EUR	HPAMJ00	HPBDX03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
HDPE Inj FD Holland CP Weekly	EUR	HPAMK00	HPBDY03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
HDPE Inj FD Italy CP Weekly	EUR	HPAML00	HPBDZ03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443	
HDPE Inj FD Spain CP Weekly	EUR	HPAWC04	HPAWD03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443	
LLDPE Metallocene C6 FD NWE weekly	EUR	AAQCZ00	AAQCZ03		Spot	FD	Northwest Europe	3-30 days forward	100		MT	PC268		
LLDPE Standard C6 FD NWE weekly	EUR	AAQCY00	AAQCY03		Spot	FD	Northwest Europe	3-30 days forward	100		MT	PC268		
LLDPE G-P CFR Russia Weekly	EUR	AAUMT00	AAUMT03		Spot	CFR	Russia	3-30 days forward			MT	PC0239		
LLDPE G-P CFR Turkey Weekly	USD	AAWXM00	AAWXM03		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0268		
LLDPE C6 Blown FD NWE CP Weekly	EUR	AAQCB00	AAQCB03		Contract	FD	Northwest Europe	Current month			MT	PC0240		
LLDPE C6 CSF FD NWE CP Weekly	EUR	AAQCC00	AAQCC03		Contract	FD	Northwest Europe	Current month			MT	PC0240		
LLDPE G-P CFR North Africa Weekly	USD	AAVWF00	AAVWF03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	PC0239		
LLDPE Butene CFR West Africa Weekly	USD	ABAAH04	ABAAH03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	pc239		
LLDPE CSF FD Britain CP Weekly	GBP	AAPFS00	AAPFS03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LLDPE CSF FD France CP Weekly	EUR	AAPFQ00	AAPFQ03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LLDPE CSF FD Germany CP Weekly	EUR	AAPFN00	AAPFN03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LLDPE CSF FD Holland CP Weekly	EUR	AAPF000	AAPF003		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LLDPE CSF FD Italy CP Weekly	EUR	AAPFF00	AAPFF03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443	
LLDPE CSF FD NWE CP Weekly	USD	AAPFM00	AAPFM03		Contract	FD	Northwest Europe	Current month			MT	PC0268		
LLDPE CSF FD Spain CP Weekly	EUR	AAPFR00	AAPFR03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443	
LLDPE G-P FD NWE CP Weekly	USD	PHAGY00	PHBAU03		Contract	FD	Northwest Europe	Current month			MT	PC0263		

## POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE (mt)	MAX SIZE	UOM	PC Page		
												CODE	Mavg	Wavg
LLDPE G-P FD Britain CP Weekly	GBP	PHAMD00	PHBDW03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LLDPE G-P FCA Antwerp	EUR	AAVKA00	AAVKA03	AAVKA04	Spot	FCA	Northwest Europe	3-30 days forward	100		MT	PC571		PC0573
LLDPE G-P FD France CP Weekly	EUR	HPAMC00	HPBDV03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LLDPE G-P FD NWE Spot	EUR	AALUL00	AALUM00	AAQNR00	Spot	FD	Northwest Europe	3-30 days forward	100		MT	PC571		PC0573
LLDPE G-P FD Germany CP Weekly	EUR	HPALZ00	HPBDS03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LLDPE G-P FD Holland CP Weekly	EUR	HPAMA00	HPBDT03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LLDPE G-P FD Italy CP Weekly	EUR	HPAMB00	HPBDU03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443	
LLDPE G-P Spain CP Weekly	EUR	HPAWA04	HPAWB03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0443	
LDPE G-P CFR North Africa Weekly	USD	AAVWE00	AAVWE03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	PC0239		
LDPE G-P CFR West Africa Weekly	USD	ABAAG04	ABAAG03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	pc239		PC0573
LDPE G-P FCA Antwerp	EUR	AAVKB00	AAVKB03	AAVKB04	Spot	FCA	Northwest Europe	3-30 days forward	100		MT	PC571		PC0573
LDPE G-P FD NWE Spot	EUR	AALUJ00	AALUK00	AAQNQ00	Spot	FD	Northwest Europe	3-30 days forward	100		MT	PC571		
LDPE G-P CFR Russia Weekly	EUR	AAUMS00	AAUMS03		Spot	CFR	Russia	3-30 days forward			MT	PC0239		
LDPE G-P CFR Turkey Weekly	USD	AAWXL00	AAWXL03		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239	PC0443	
LDPE G-P FD Britain CP Weekly	GBP	PHALY00	PHBDR03		Contract	FD	Northwest Europe	Current month			MT	PC0240		
LDPE G-P FD NWE CP Weekly	USD	PHAHR00	PHBAP03		Contract	FD	Northwest Europe	Current month			MT	PC0263	PC0443	
LDPE G-P FD Spain CP Weekly	EUR	HPAVY04	HPAVZ03		Contract	FD	Mediterranean	Current month			MT	PC0240		
LDPE G-P FOB NWE Spot Weekly	USD	PHAHS00	PHBAQ03		Spot	FOB	Northwest Europe	3-30 days forward	300		MT	PC0239	PC0443	
LDPE G-P FD France CP Weekly	EUR	HPALX00	HPBDQ03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LDPE G-P FD Germany CP Weekly	EUR	HPALU00	HPBDN03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LDPE G-P FD Holland CP Weekly	EUR	HPALV00	HPBD003		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0443	
LDPE FD G-P Italy CP Weekly	EUR	HPALW00	HPBDP03		Contract	FD	Mediterranean	Current month			MT	PC0240		
LLDPE C6 CSF FD NWE CP Weekly	USD	AAQCC10	AAQCC13		Contract	FD	Northwest Europe	Current month			MT	PC0268		
LLDPE C6 Blown FD NWE CP Weekly	USD	AAQCB10	AAQCB13		Contract	FD	Northwest Europe	Current month			MT	PC0268		
<b>Polystyrene</b>														
PS G-P FD NWE spot Weekly	EUR	AALUN00	AALU000		Spot	FD	Northwest Europe	3-30 days forward	20		MT	PC0276		
PS G-P FOB NWE spot Weekly	USD	PHAIK00	PHBBJ03		Spot	FOB	Northwest Europe	3-30 days forward	300		MT	PC0276		
PS G-P NET FD NWE CP Weekly	USD	AAUEL00	AAUEL03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
PS G-P Net FD Britain CP Weekly	GBP	HPTSC00	HPTSC03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
PS G-P Net FD France CP Weekly	EUR	HPTSA00	HPTSA03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
PS G-P Net FD Germany CP Weekly	EUR	HPTRU00	HPTRU03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
PS G-P Net FD Holland CP Weekly	EUR	HPTRW00	HPTRW03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
PS G-P Net FD Italy CP Weekly	EUR	HPTRY00	HPTRY03		Contract	FD	Mediterranean	Current month			MT	PC0276	PC0443	
PS G-P Net FD Spain CP Weekly	EUR	HPTSE00	HPTSE03		Contract	FD	Mediterranean	Current month			MT	PC0276		
PS G-P CFR Turkey Weekly	USD	AAWYN00	AAWYN03		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239		
PS G-P CFR North Africa Weekly	USD	AAVWM00	AAVWM03		Spot	CFR	Mediterranean	3-30 days forward	100	500	MT	PC0239		
HIPS FD NWE spot Weekly	EUR	AALUP00	AALUQ00		Spot	FD	Northwest Europe	3-30 days forward	20		MT	PC0276		

## POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE (mt)	MAX SIZE	UOM	PC Page		
												CODE	Mavg	Wavg
HIPS FOB NWE spot Weekly	USD	PHAIQ00	PHB8003		Spot	FOB	Northwest Europe	3-30 days forward	300		MT	PC0276		
HIPS NET FD NWE CP Weekly	USD	AAUEK00	AAUEK03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
HIPS Net FD Britain CP Weekly	GBP	HPTSD00	HPTSD03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
HIPS Net FD France CP Weekly	EUR	HPTSB00	HPTSB03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
HIPS net FD Germany CP Weekly	EUR	HPTRV00	HPTRV03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
HIPS Net FD Holland CP Weekly	EUR	HPTRX00	HPTRX03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
HIPS Net FD Italy CP Weekly	EUR	HPTRZ00	HPTRZ03		Contract	FD	Mediterranean	Current month			MT	PC0276	PC0443	
HIPS Net FD Spain CP Weekly	EUR	HPTSF00	HPTSF03		Contract	FD	Mediterranean	Current month			MT	PC0276	PC0443	
HIPS CFR North Africa Weekly	USD	AAVWN00	AAVWN03		Spot	CFR	Mediterranean	3-30 days forward	100	500	MT	PC0239		
HIPS CFR Turkey Weekly	USD	AAWY000	AAWY003		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239	PC0443	
EPS FD Spain CP Weekly	EUR	AAVKQ00	AAVKQ03		Contract	FD	Mediterranean	Current month			MT	PC0276	PC0443	
EPS FD Britain CP Weekly	GBP	AAVKP00	AAVKP03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
EPS FD France CP Weekly	EUR	AAVK000	AAVK003		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
EPS FD Germany CP Weekly	EUR	AAVKL00	AAVKL03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
EPS FD Holland CP Weekly	EUR	AAVKM00	AAVKM03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
EPS FD Italy CP Weekly	EUR	AAVKN00	AAVKN03		Contract	FD	Mediterranean	Current month			MT	PC0276	PC0443	
EPS FD NWE CP Weekly	USD	AAVKU00	AAVKU03		Contract	FD	Northwest Europe	Current month			MT	PC0276	PC0443	
EPS FD NWE Spot Weekly	EUR	AAVKR00	AAVKR03		Spot	FD	Northwest Europe	3-30 days forward	20		MT	PC0276	PC0443	
EPS FOB NWE Weekly	USD	AAVKV00	AAVKV03		Spot	FOB	Northwest Europe	3-30 days forward	300		MT	PC0276	PC0443	
EPS CFR Turkey Weekly	USD	AAVKW00	AAVKW03		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239	PC0443	
<b>Polypropylene</b>														
PP Homo injection Germany CP Weekly	EUR	HPAMY00	HPBER03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PP Homo injection Holland CP Weekly	EUR	HPAMZ00	HPBES03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PP Homo injection Italy CP Weekly	EUR	HPANA00	HPBET03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
PP Homo injection France CP Weekly	EUR	HPANB00	HPBEU03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PP Homo injection Spain CP Weekly	EUR	HPAWI04	HPAWJ03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
PP Homo injection Britain CP Weekly	GBP	PHANC00	PHBEV03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PP Homo injection FD NWE CP Weekly	USD	PHAIID00	PHBBS03		Contract	FD	Northwest Europe	Current month			MT	PC0263	PC0445	
PP Copol Germany CP Weekly	EUR	HPAND00	HPBEW03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PP Copol Holland CP Weekly	EUR	HPANE00	HPBEX03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PP Copol Italy CP Weekly	EUR	HPANF00	HPBEY03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
PP Copol France CP Weekly	EUR	HPANG00	HPBEZ03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PP Copol Spain CP Weekly	EUR	HPAWK04	HPAWT03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
PP Copol Britain CP Weekly	GBP	PHANH00	PHBFA03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PP Copol FD NWE CP Weekly	USD	PHAHX00	PHBCF03		Contract	FD	Northwest Europe	Current month			MT	PC0263	PC0445	
PP Homo Injection FOB NWE Weekly	USD	PHAIIE00	PHBBT03		Spot	FOB	Northwest Europe	3-30 days forward	300		MT	PC0239	PC0573	
PP Homo Injection FD NWE	EUR	AALUR00	AALUS00	AAQNS00	Spot	FD	Northwest Europe	3-30 days forward	20		MT	PC571	PC0573	

## POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE (mt)	MAX SIZE	UOM	PC Page		
												CODE	Mavg	Wavg
PP Homo Injection FCA Antwerp	EUR	AAVKC00	AAVKC03	AAVKC04	Spot	FCA	Northwest Europe	3-30 days forward	20		MT	PC571		
PP Homo injection CFR Russia Weekly	EUR	AAUMX00	AAUMX03		Spot	CFR	Russia	3-30 days forward	20		MT	PC0239		
PP Homo injection CFR Turkey Weekly	USD	AAWXQ00	AAWXQ03		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239		
PP Raffia CFR Turkey Weekly	USD	AAVG00	AAVG03		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239		
PP Copol FOB NWE Weekly	USD	PHAHY00	PHBCG03		Spot	FOB	Northwest Europe	3-30 days forward	300		MT	PC0239		
PP Copol FD NWE Weekly	EUR	AALUT00	AALUU00		Spot	FD	Northwest Europe	3-30 days forward	20		MT	PC0239		
PP Copol FCA Antwerp Weekly	EUR	AAVY00	AAVY03		Spot	FCA	Northwest Europe	3-30 days forward	20		MT	PC0239		
PP Copol CFR Russia Weekly	USD	AAUMY00	AAUMY03		Spot	CFR	Russia	3-30 days forward	20		MT	PC0239		
PP Copol CFR Turkey Weekly	USD	AAWXR00	AAWXR03		Spot	CFR	Mediterranean	3-30 days forward			MT	PC0239		
PP Homo Inj CFR North Africa Weekly	USD	AAVWJ00	AAVWJ03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	PC0239		
PP Raffia CFR North Africa Weekly	USD	AAVWK00	AAVWK03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	PC0239		
PP Copol CFR North Africa Weekly	USD	AAVWL00	AAVWL03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	PC0239		
Polypropylene Homo Injection CFR West Africa Weekly	USD	ABAAL04	ABAAL03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	pc239		
Polypropylene Copolymer CFR West Africa Weekly	USD	ABAAM04	ABAAM03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	pc239		
Polypropylene Raffia CFR West Africa Weekly	USD	ABAAN04	ABAAN03		Spot	CFR	Mediterranean	15-45 days forward	100	500	MT	pc239		
<b>Polyethylene Terephthalate (PET)</b>														
Recycled-PET FD NWE Weekly	EUR	AAVKX00	AAVKX03		Spot	FD	Northwest Europe	3-30 days	20		MT	PC0239		
Recycled-PET FD Britain Weekly	GBP	AAVKY00	AAVKY03		Spot	FD	Northwest Europe	3-30 days	20		MT	PC0239		
Recycled PET FGP FD NWE Weekly	EUR	ARPGA04	ARPGA03		Spot	FD	Northwest Europe	3-30 days	20		MT	PC0239		
Recycled PET FGP FD Britain Weekly	GBP	ARPGC04	ARPGC03		Spot	FD	Northwest Europe	3-30 days	20		MT	PC0239		
PET FD NWE Weekly	EUR	AAXOB00	AAXOB03		Spot	FD	Northwest Europe	3-30 days	20		MT	PC0239		
PET FD Britain Weekly	EUR	AAXOC00	AAXOC03		Spot	FD	Northwest Europe	3-30 days	20		MT	PC0239		
PET FD Britain Weekly	GBP	AAXOD00	AAXOD03		Spot	FD	Northwest Europe	3-30 days	20		MT	PC0239		
Recycled-PET FD Britain Weekly	EUR	AAVKZ00	AAVKZ03		Spot	FD	Northwest Europe	3-30 days	20		MT	PC0239	PC0445	
Recycled PET FGP FD Britain Weekly	EUR	ARPGB04	ARPGB03		Spot	FD	Northwest Europe	3-30 days	20		MT	PC0239		
PET Bottle Grade FD France CP Weekly	EUR	AACVB00	AACVC00		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PET Bottle Grade FD Italy CP Weekly	EUR	AACVI00	AACVK00		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
PET Bottle Grade FD Britain CP Weekly	GBP	AACVL00	AACVM00		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
PET Bottle Grade FD Britain CP Weekly	EUR	AACVN00	AACV000		Contract	FD	Northwest Europe	Current month			MT	PC0240		
PET Bottle Grade FD NWE CP Weekly	EUR	AACVR00	AACVS00		Contract	FD	Northwest Europe	Current month			MT	PC0263	PC0445	
PET Bottle Grade FD Spain CP Weekly	EUR	AACWG00	AACWH00		Contract	FD	Mediterranean	Current month			MT	PC0240		
PET Bottle Grade FD NWE Net CP Weekly	EUR	AAVLE04	AAVLE03		Contract	FD	Northwest Europe	Current month			MT	PC0263		
PET Bottle Grade FD NWE Net CP Weekly	USD	AAVLE10	AAVLE13		Contract	FD	Northwest Europe	Current month			MT	PC0506	PC0445	
PET Bottle Grade FD Britain Net CP Weekly	GBP	AAVLF04	AAVLF03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	

## POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE (mt)	MAX SIZE	UOM	PC Page		
												CODE	Mavg	Wavg
PET Bottle Grade FD Britain Net CP Weekly	EUR	AAVLG04	AAVLG03		Contract	FD	Northwest Europe	Current month			MT	PC0240		
APET Film Grade FD NWE CP Weekly	EUR	AACWV00	AACWV00		Contract	FD	Northwest Europe	Current month			MT	PC0263		
APET Film Grade FD NWE Net CP Weekly	EUR	AAVLH04	AAVLH03		Contract	FD	Northwest Europe	Current month			MT	PC0263		
<b>Polyvinyl Chloride (PVC)</b>														
PVC Susp FOB NWE Spot Weekly	USD	PHAIW00	PHBAL03		Spot	FOB	Northwest Europe	3-30 days	300	-	MT	PC0239		
PVC Susp FD NWE Spot Weekly	EUR	AALUV00	AALUV00		Spot	FD	Northwest Europe	3-30 days	20	-	MT	PC0239	PC0442	
PVC Susp CFR Russia Spot Weekly	USD	AAXCK00	AAXCK03		Spot	CFR	Russia	3-30 days		-	MT	PC0239		
PVC Susp CFR Russia Weekly	EUR	AAUMR00	AAUMR03		Spot	CFR	Russia	3-30 days		-	MT	PC0239		
PVC Susp CFR Turkey Weekly	USD	AAWXK00	AAWXK03		Spot	CFR	Mediterranean	3-30 days		-	MT	PC0239	PC0443	
PVC Susp FD Germany CP Gross Weekly	EUR	HPALP00	HPBDI03		Contract	FD	Northwest Europe	Current month		-	MT	PC0240	PC0443	
PVC Susp FD Holland CP Gross Weekly	EUR	HPALQ00	HPBDJ03		Contract	FD	Northwest Europe	Current month		-	MT	PC0240	PC0443	
PVC Susp FD Italy CP Gross Weekly	EUR	HPALR00	HPBDK03		Contract	FD	Mediterranean	Current month		-	MT	PC0240	PC0443	
PVC Susp FD France CP Gross Weekly	EUR	HPALS00	HPBDL03		Contract	FD	Northwest Europe	Current month		-	MT	PC0240	PC0443	
PVC Susp FD Spain CP Gross Weekly	EUR	HPAVW04	HPAVX03		Contract	FD	Mediterranean	Current month		-	MT	PC0240	PC0443	
PVC Susp FD Britain CP Gross Weekly	GBP	PHALT00	PHBDM03		Contract	FD	Northwest Europe	Current month		-	MT	PC0240		
PVC Susp FD NWE CP Weekly	USD	PHAIW00	PHBAK03		Contract	FD	Northwest Europe	Current month		-	MT	PC0260	PC0443	
PVC Susp FD Germany CP Net Weekly	EUR	AAXCE00	AAXCE03		Contract	FD	Northwest Europe	Current month		-	MT	PC0240	PC0443	
PVC Susp FD Holland CP Net Weekly	EUR	AAXCF00	AAXCF03		Contract	FD	Northwest Europe	Current month		-	MT	PC0240	PC0443	
PVC Susp FD Italy CP Net Weekly	EUR	AAXCG00	AAXCG03		Contract	FD	Mediterranean	Current month		-	MT	PC0240	PC0443	
PVC Susp FD France CP Net Weekly	EUR	AAXCH00	AAXCH03		Contract	FD	Northwest Europe	Current month		-	MT	PC0240	PC0443	
PVC Susp FD Spain CP Net Weekly	EUR	AAXCJ00	AAXCJ03		Contract	FD	Mediterranean	Current month		-	MT	PC0240	PC0443	
PVC Susp FD Britain CP Net Weekly	GBP	AAXCI00	AAXCI03		Contract	FD	Northwest Europe	Current month		-	MT	PC0240		
<b>Acrylonitrile Butadiene Styrene (ABS)</b>														
ABS Auto Black Spain CP Weekly	EUR	HPAWR04	HPAWS03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
ABS Auto Black Italy CP Weekly	EUR	HPANN00	HPBFG03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
ABS Auto Black Germany CP Weekly	EUR	HPANM00	HPBFF03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
ABS Auto Black France CP Weekly	EUR	HPANO00	HPBFH03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
ABS Auto Black FD Britain CP Weekly	GBP	PHANP00	PHBFI03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
ABS Average Color Italy Weekly	EUR	HPANJ00	HPBHM03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
ABS Average Avg Color Spain CP Weekly	EUR	HPAWP04	HPAWQ03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
ABS Average Color Germany CP Weekly	EUR	HPANI00	HPBFB03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
ABS Average Color France CP Weekly	EUR	HPANK00	HPBFD03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
ABS Average Color FD Britain CP Weekly	GBP	PHANL00	PHBFE03		Contract	FD	Northwest Europe	Current month			MT	PC0240		
ABS Avg Color FD NWE Contract CP Weekly	USD	PHAHD00			Contract	FD	Northwest Europe	Current month			MT	PC0263	PC0445	



## POLYMERS

Assessment	CURRENCY	CODE	Mavg	Wavg	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE (mt)	MAX SIZE	UOM	PC Page		
												CODE	Mavg	Wavg
ABS GP/Nat FD Spain CP Weekly	EUR	AAQCP00	AAQCP03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
ABS GP/Nat FD Italy CP Weekly	EUR	AAQCN00	AAQCN03		Contract	FD	Mediterranean	Current month			MT	PC0240	PC0445	
ABS GP/Nat FD Germany CP Weekly	EUR	AAQCL00	AAQCL03		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
ABS GP/Nat FD France CP Weekly	EUR	AAQC000	AAQC003		Contract	FD	Northwest Europe	Current month			MT	PC0240	PC0445	
ABS GP/Nat FD Britain CP Weekly	GBP	AAQCQ00	AAQCQ03		Contract	FD	Northwest Europe	Current month			MT	PC0240		
ABS GP/Nat CFR NWE Weekly Spot	USD	AAQCR00	AAQCR03		Spot	CFR	Northwest Europe	3-30 days forward	300		MT	PC0239		
ABS GP/Nat FD NWE Weekly	EUR	AAQCT00	AAQCT03		Spot	FD	Northwest Europe	3-30 days forward	20		MT	PC0239		
ABS GP/Nat FD NWE CP Weekly	USD	AAQCS00	AAQCS03		Contract	FD	Northwest Europe	Current month			MT	PC0284		
<b>Styrene, Butadiene Rubber</b>														
ESBR 1500 FOB NWE Weekly	USD	AAWXB00	AAWXB03		Spot	FOB	Northwest Europe	3-30 days forward	500		MT	PC0752	PC0754	
ESBR 1502 FOB NWE Weekly	USD	AAWXD00	AAWXD03		Spot	FOB	Northwest Europe	3-30 days forward	500		MT	PC0752	PC0754	
ESBR 1723 FOB NWE Weekly	USD	AAWXF00	AAWXF03		Spot	FOB	Northwest Europe	3-30 days forward	500		MT	PC0752	PC0754	
ESBR 1783 FOB NWE Weekly	USD	AAWXH00	AAWXH03		Spot	FOB	Northwest Europe	3-30 days forward	500		MT	PC0752	PC0754	
SSBR FOB NWE weekly	USD	AAWXJ00	AAWXJ03		Spot	FOB	Northwest Europe	3-30 days forward	500		MT	PC0752	PC0754	
ESBR 1500 FD NWE Weekly	EUR	AAWXA00	AAWXA03		Spot	FD	Northwest Europe	3-30 days forward	100	200	MT	PC0752	PC0754	
ESBR 1502 FD NWE Weekly	EUR	AAWXC00	AAWXC03		Spot	FD	Northwest Europe	3-30 days forward	100	200	MT	PC0752	PC0754	
ESBR 1723 FD NWE Weekly	EUR	AAWXE00	AAWXE03		Spot	FD	Northwest Europe	3-30 days forward	100	200	MT	PC0752	PC0754	
ESBR 1783 FD NWE Weekly	EUR	AAWXG00	AAWXG03		Spot	FD	Northwest Europe	3-30 days forward	100	200	MT	PC0752	PC0754	
SSBR FD NWE weekly	EUR	AAWXI00	AAWXI03		Spot	FD	Northwest Europe	3-30 days forward	100	200	MT	PC0752	PC0754	

## Polymers

Platts' polymer contract price assessments in Europe reflect gross and/or net prices negotiated between contract parties for monthly deliveries. Platts defines a contract price as one negotiated against an annual commitment to supply or procure regular monthly volumes. Platts may use information on all contractually agreed volumes to form the basis of its assessments, although assessments will be normalized to reflect contractual commitments of 3,000-6,000 mt/year. In the absence of any outright contract price information, Platts will take price direction from the more liquid spot market. Platts recognizes that the spot and contract markets are independent markets with different dynamics and Platts will only take direction from the spot market in the absence of confirmed

contract values. The governing factor in the price assessments, however, is to reflect the negotiated and mutually-agreed absolute price.

### Polyethylene

**Assessment Window:** Weekly assessments are based on the latest information from the market up to the close of the assessment window at 4:30 pm London time on Wednesday.

**Timing:** Domestic PE contract assessments in Europe reflect gross prices (before discounts) agreed for regular monthly business. Platts contract assessments reflect the free negotiation process each week as confirmation is received both on preliminary data and concluded deals from buyers and

sellers. Spot assessments specify a loading date of 3 to 30 days from the day of publication.

### Basis and Locations:

**Weekly contract assessments:** European FD domestic contract prices are in Eur/mt with the exception of the UK market, which is in GBP/mt. The NWE domestic assessments are for products delivered within each country respectively. The FD NWE contract prices are calculated by converting the FD Germany contract prices from euro to US dollars based on weekly exchange rates as published by Platts.

**Weekly spot assessments:**

- FOB NWE basis Amsterdam-Rotterdam-Antwerp;
- FD NWE;
- CFR Russia basis St Petersburg;
- CFR Turkey basis Istanbul;
- CFR North Africa basis Morocco, Algeria, Tunisia and Egypt mainports.

The CFR Turkey assessments exclude import duties.

The CFR North Africa assessments reflect products for delivery 15-45 days forward from the date of publication with 60 days net payment terms.

Platts also assesses Free Carrier (FCA) Antwerp spot prices in Eur/mt.

**Daily spot assessments:** LDPE FD NWE, LLDPE FD NWE, LDPE FCA Antwerp, LLDPE FCA Antwerp.

**Standard cargo size:** Minimum 100mt lots for domestic business, minimum 300 mt lots for export business. For CFR Africa, cargo size is between 100-500 mt lots.

**Product Specifications:** European assessments cover indigenous Western European and/or imported prime material. Product sold in plain or unmarked bags is not included in the assessment unless the market considers such business to be representative.

- **Low Density Polyethylene:** the assessment is for material within the melt flow index of between 0.3-4.0; density between 918-920 kg/m<sup>3</sup>.

- **Linear Low Density Polyethylene C4 Blown Film:** butene-grade linear with a melt flow index of around 0.8-1.0, and density between 918-925 kg/m<sup>3</sup>.
- **Linear Low Density Polyethylene C4 Cast Stretch Film:** linear with a melt flow index of between 2.0-3.0 under standard pressure and temperature, and a density of between 918-925 kg/m<sup>3</sup>.
- **Linear Low Density Polyethylene C6 blown and cast stretch film:** 1-Hexene co-monomer with density between 917-922 kg/m<sup>3</sup> for both cast and blown film and a melt flow index between 0.9-3.5.
- **Linear Low Density Polyethylene metallocene blown and cast stretch film:** 1-Hexene co-monomer based on metallocene catalyst with a density of 912-940 kg/m<sup>3</sup> for both cast and blown film, and a melt flow index between 0.5-4.5.
- **High Density Polyethylene injection grade:** Assessments cover material with a melt flow rate between 4.0-8.0 with density between 950-960 kg/m<sup>3</sup>. The major applications for this grade are crates and boxes.
- **High Density Polyethylene blow-molding grade:** Assessments cover medium molecular weight material with a melt flow rate between 0.22-0.40 with density between 950-960 kg/m<sup>3</sup>, typically for half liter and 3-4 liter bottle applications.
- **High Density Polyethylene film grade:** Assessments cover uni-modal grade with a melt flow rate between 8.0-10.0 and density between 950-960 kg/m<sup>3</sup>.
- **High Density Polyethylene high molecular weight:** Assessments cover material with a high load melt index (HLMI) of between 2.0-5.0 and 5.0-10.0, and density of between 950-955 kg/m<sup>3</sup>.

**Polystyrene**

**Assessment Window:** Weekly assessments are based on the latest information from the market up to the close of the assessment window at 4:30 pm London time on Wednesday. Polystyrene assessments cover general purpose grade (GPPS), high impact (HIPS) and expandable (EPS).

**Timing:** Domestic PS, EPS contract assessments in Europe reflect net prices (after discounts) agreed for regular monthly business. Platts contract assessments reflect the free negotiation process each week as confirmation is received both on preliminary data and concluded deals from buyers and sellers. Spot assessments specify a loading date of 3 to 30 days from the day of publication.

**Basis and Locations:**

**Weekly contract assessments:** European FD domestic contract prices are in Eur/mt with the exception of the UK market, which is in GBP/mt.

NWE domestic assessments are for product delivered within each country respectively.

The FD NWE prices are calculated by converting the FD Germany contract prices from euros to US dollars based on weekly exchange rates.

Domestic GPPS and HIPS net contract assessments in Europe reflect net prices (after discounts) which are agreed for regular monthly contractual business.

**Weekly spot assessments:**

- FOB NWE basis Amsterdam-Rotterdam-Antwerp;
- FD NWE,

- CFR Turkey basis Istanbul,
- CFR North Africa basis Morocco, Algeria, Tunisia and Egypt mainports.

**Standard cargo size:** Minimum 20mt lots for inland domestic business, 300mt lots for export business. For CFR Africa, cargo size is between 100-500 mt lots.

**Product Specifications:** European assessments cover indigenous Western European and/or imported prime material. Product sold in plain or unmarked bags is not included in the assessment unless the market considers such business to be representative.

In NWE, the GPPS assessment covers material with a melt flow index of between 1.0-20 while the HIPS assessment is for product with a melt flow index of between 2-20. EPS assessment is for product used in insulation with flame retardant properties.

## Polypropylene

**Assessment Window:** Weekly assessments are based on the latest information from the market up to the close of the assessment window at 4:30 pm London time on Wednesday.

**Timing:** Domestic PP contract assessments in Europe reflect gross prices (before discounts) agreed for regular monthly business. Platts contract assessments reflect the free negotiation process each week as confirmation is received both on preliminary data and concluded deals from buyers and sellers. Spot assessments specify a loading date of 3 to 30 days from the day of publication.

**Basis and Locations:** Weekly contract assessments: NWE domestic assessments are for product delivered within each country respectively.

FD NWE contract prices are calculated by converting the FD

Germany contract prices from euros to US dollars based on weekly exchange rates as published by Platts.

### Weekly spot assessments:

- FOB NWE basis Amsterdam-Rotterdam-Antwerp;
- FD NWE spot;
- CFR Russia basis St Petersburg;
- CFR Turkey basis Istanbul;
- CFR North Africa basis Morocco, Algeria, Tunisia and Egypt mainports.

CFR Turkey assessments exclude import duties.

The CFR North Africa assessments, for homo, copolymer and raffia grades, reflect products for delivery 15-45 days forward from the date of publication with 60 days net payment terms.

**Daily spot assessments:** PP homo injection FD NWE, PP homo injection FCA Antwerp.

**Standard cargo size:** Minimum 20mt lots for domestic business and CFR Russia, 300mt lots for export business. For CFR Africa, cargo size is between 100-500 mt lots.

**Product Specifications:** European assessments cover indigenous Western European and/or imported prime material. Product sold in plain or unmarked bags is not included in the assessment unless the market considers such business to be representative.

- **Polypropylene homopolymer injection grade:** Assessments cover materials with a melt flow index between 5-30.
- **Polypropylene block copolymer grade:** Assessments cover

material with a melt flow index between 2-30.

- **Polypropylene raffia grade:** European assessments cover CFR Turkey and CFR North Africa only, with a minimum melt flow rate of 3.5 without additives.

## Polyethylene Terephthalate (PET)

**Assessment Window:** Assessments are based on the latest information from the market up to the close of the assessment window at 4:30 pm London time on Wednesday.

Platts PET assessments cover bottle and film grades and recycled PET (R-PET) colourless flakes and food-grade pellets.

**Timing:** Domestic PET contract assessments in Europe reflect gross (before discounts) and net (after discounts) prices agreed for regular monthly business. Platts contract assessments reflect the free negotiation process each week as confirmation is received both on preliminary data and concluded deals from buyers and sellers. Spot assessments specify a loading date of 3 to 30 days from the day of publication.

**Weekly contract assessments:** Domestic net PET contract assessments in Europe reflect negotiated net prices (after discounts) which are agreed for regular monthly contractual business. Domestic gross PET contract assessments in Europe reflect negotiated gross prices (before discounts) agreed for regular monthly business.

**Basis and Locations:** The NWE domestic assessments are for product delivered within each country respectively. The FD NWE contract prices are calculated by converting the FD Germany contract prices from euros to US dollars based on weekly exchange rates. Spot assessments represent PET bottle grade and R-PET prices for FD NWE and FD UK. These specify a loading date of 3 to 30 days from the day of publication.

For R-PET, assessments reflect prices paid for European and

UK produced flakes and food-grade pellets derived from post-consumer virgin PET polymer.

**Standard spot cargo size:** Minimum 20mt lots for domestic business, 300mt lots for export business.

**Product Specifications:** European assessments cover indigenous Western European and/or imported prime material. Product sold in plain or unmarked bags is not included in the assessment unless the market considers such business to be representative.

Bottle grade assessments cover standard bottle-grade material with an IV of between 0.7-0.86 and is B\* neutral. The film grade assessment refers to APET sheet with the same characteristics. For R-PET flake, assessments reflect material with IV of 0.84, containing an average 10% of post-consumer recycle content. The colorless flake has been through a hot-wash process. For R-PET food grade pellet, assessments reflect material with a minimum IV of 0.8.

(Notes: IV refers to intrinsic viscosity, a measure of molecular weight, or the degree of its polymerization. An IV value in the range that Platts quotes represents a commodity grade plastic, which is usually used for mineral water. B\* is a measure of the degree of yellowness of the resin.)

### Polyvinyl Chloride (PVC)

**Assessment Window:** Assessments are based on the latest information from the market up to the close of the assessment window at 4:30 pm Wednesday.

**Timing:** Domestic PVC contract assessments in Europe reflect gross prices agreed for regular monthly business. Platts contract assessments reflect the free negotiation process each week as confirmation is received both on preliminary data and concluded deals from buyers and sellers. Spot assessments specify a loading date of 3 to 30 days from the day of publication.

### Basis and Locations:

**Weekly contract assessments:** NWE domestic assessments are for product delivered within each country respectively.

FD NWE contract prices are calculated by converting the FD Germany contract prices from euros to US dollars based on exchange rates as published by Platts.

### Weekly spot assessments:

- FOB NWE basis Amsterdam-Rotterdam-Antwerp
- FD NWE
- CFR Russia basis St Petersburg
- CFR Turkey basis Istanbul, excluding duties

**Standard cargo size:** Minimum volume of 20 mt lots for domestic business and 300mt lots for export business.

**Product Specifications:** Pipe-grade suspension PVC with a K-value of 66-68.

### Acrylonitrile Butadiene Styrene (ABS)

**Assessment Window:** Assessments are based on the latest information from the market up to the close of the assessment window at 4:30 pm London Wednesday.

**Timing:** Domestic ABS contract assessments in Europe reflect gross prices agreed for regular monthly business. Platts contract assessments reflect the free negotiation process each week as confirmation is received both on preliminary data and concluded deals from buyers and sellers. Spot assessments specify a loading date of 3 to 30 days from the day of publication.

**Basis and Locations:** The FD NWE price is calculated by converting

the FD Germany assessment from euro to US dollar based on weekly exchange rates. Export prices are assessed on a FOB basis.

**Standard spot cargo size:** Minimum volume of 20mt lots for domestic business and 300mt lots for export business.

**Product Specifications:** Platts assesses the base ABS grade known as general purpose/natural grade resins. This is injection grade material with a melt flow index of 10-40. Platts also assesses average color and auto black grades. Platts acknowledges the variance in price of colored versus auto black resins depending on the color of the resin. The assessments for colored/auto black resins are based on Platts best estimate, taking into account the premium over natural grade resin as reported by market participants.

### Styrene, Butadiene Rubber

**Assessment Window:** Weekly assessments are based on the latest information from the market up to close of the assessment window at 4:30 pm London time Friday or last working day of the week in case of holidays.

**Timing:** Material loading/delivered 3-30 days forward from the day of publication.

**Basis and Locations:** Platts assessments of Emulsion SBR and Solution SBR are basis NWE. In addition to Rotterdam, ESBR and SSBR assessments reflect all major Northwest European ports including Italy and Spain.

**Standard cargo size:** SBR spot assessments on a FD NWE basis reflect standard parcel lots of 100-200 mt or 10-20 containers. Assessments on a FOB NWE basis reflect volumes of 500 mt and above.

**Product Specification:** Standard quality ESBR grades 1500, 1502, 1723 and 1783. The SSBR assessment is for solution SBR grades with 25% styrene content and vinyl content ranging between 45% and 64%.

## INTERMEDIATES

Assessment	CURRENCY	CODE	Mavg	Wavg	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	PC Page			
												CODE	Mavg	Wavg	
<b>Oxo Alcohols</b>															
N-Butanol FD NWE Weekly	EUR	HPAG00	HPAPH03		Spot	FD	NWE	3-30 days forward	20		MT	PC0160			
N-Butanol FOB Rotterdam Weekly	USD	PHAPE00	PHAPF03		Spot	FOB	Rotterdam	3-30 days forward	500	1000	MT	PC0160			
Isobutanol FD NWE Weekly	EUR	HPAPK00	HPAPL03		Spot	FD	NWE	3-30 days forward	20		MT	PC0160			
Isobutanol FOB Rotterdam Weekly	USD	PHAPI00	PHAPJ03		Spot	FOB	Rotterdam	3-30 days forward	500	1000	MT	PC0160			
2-EH FD NWE Weekly	EUR	HPAPO00	HPAPP03		Spot	FD	NWE	3-30 days forward	20		MT	PC0160			
2-EH FOB Rotterdam Weekly	USD	PHAPM00	PHAPN03		Spot	FOB	Rotterdam	3-30 days forward	500	1000	MT	PC0160			
PA FL FD NWE Weekly	EUR	HPAPW00	HPAPX03		Spot	FD	NWE	3-30 days forward	20		MT	PC0160			
PA FL FOB Rotterdam Weekly	USD	PHAPU00	PHAPV03		Spot	FOB	Rotterdam	3-30 days forward	500	1000	MT	PC0160			
PA MN FD NWE Weekly	EUR	HPAPY00	HPAPZ03		Spot	FD	NWE	3-30 days forward	20		MT	PC0160			
<b>Ethylene Dichloride (EDC)</b>															
EDC FOB NWE Weekly	USD	PHAQK00	PHAQL03		Spot	FOB	NWE	3-30 days forward	500	1000	MT	PC0181			
<b>Vinyl Chloride Monomer (VCM)</b>															
VCM FOB NWE Weekly	USD	PHAQO00	PHAQP03		Spot	FOB	NWE	3-30 days forward	500	1000	MT	PC0181			
<b>Acetic Acid (AA)</b>															
Acetic Acid FD NWE Weekly	EUR	HPAQC00	HPAQD03		Spot	FD	NWE	3-30 days forward	20		MT	PC0172			
Acetic Acid FOB NWE Weekly	USD	PHAQA00	PHAQB03		Spot	FOB	NWE	3-30 days forward	500	1000	MT	PC0172			
<b>Vinyl Acetate Monomer (VAM)</b>															
VAM FD NWE Weekly	EUR	HPAQG00	HPAQH03		Spot	FD	NWE	3-30 days forward	20		MT	PC0172			
VAM FOB NWE Weekly	USD	PHAQE00	PHAQF03		Spot	FOB	NWE	3-30 days forward	500	1000	MT	PC0172			
<b>PTA</b>															
PTA FD NWE Monthly CP	EUR	AACVW00	AACVX00		Contract	FD	NWE	Current month	300	2000	MT	PC509			
<b>Acrylonitrile (ACN)</b>															
Acrylonitrile CIF ARA Weekly	USD	PHAS004	PHAS003		Spot	CIF	ARA	3-30 days forward	500		MT	PC0175	PC459		

## Intermediates

### Oxo Alcohols

**Assessment Window:** Spot assessments are based on the latest information from the market up to the close of the assessment window at 4:30 pm London time Thursday. Phthalic anhydride (PA) Molten FD NWE is assessed at PA Flake FD NWE plus fixed premium of Eur250/mt.

**Timing:** Assessments reflect product for delivery or loading (for FD and FOB, respectively) 3-30 days forward from the date of publication.

**Basis and Location:** Spot prices are assessed each Thursday on a FD basis in Euro/mt and on a FOB Rotterdam basis in \$/mt. .

**Standard cargo size:** minimum 20 mt for FD Europe, between 500 mt and 1,000 mt for FOB Rotterdam assessments.

#### Product Specifications:

- **N-butanol:** Minimum purity of 99.5%. Maximum water content of 0.05%. Maximum color of 10 Hazen.
- **Iso-butanol:** Minimum purity of 99.5% and maximum water content of 0.05%. Maximum color of 10 Hazen.
- **2-EH:** Minimum purity of 99.5%. Maximum water content of 0.1% and maximum acidity of 0.01%.
- **Phthalic anhydride:** Molten and flake product with minimum purity of 99.7%. Residual maleic anhydride content maximum 0.05%. Maximum color of 20 Hazen.

### Ethylene Dichloride (EDC)/Vinyl Chloride Monomer (VCM)

**Assessment Window:** Spot assessments are based on the latest

information from the market up to the close of the assessment window at 4:30 pm London time Tuesday.

**Timing:** Product loading 3-30 days forward from the date of publication.

**Basis and Locations:** FOB Northwest Europe in \$/mt.

**Standard cargo size:** 500-1,000mt.

#### Product Specifications:

**Ethylene dichloride:** Minimum purity of 99.8%. Maximum water content of 200ppm. Maximum acidity is 10ppm.

**Vinyl chloride monomer:** Minimum purity of 99.9% and maximum water content 100ppm.

### Acetic Acid (AA)/Vinyl Acetate Monomer (VAM)

**Assessment Window:** Spot assessments are based on the latest information sourced from the market up to the close of the assessment window at 4:30 pm on Thursday.

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

**Basis and Locations:** Spot prices are assessed FD NWE in Euro/mt and FOB NWE in \$/mt, and the bulk of such business is conducted on a FOB Rotterdam basis.

**Standard cargo size:** 500-1,000mt for FOB NWE, minimum 20mt for FD NWE.

#### Product Specifications:

- **Acetic acid:** Minimum purity of 99.8%, maximum water content of 0.15% by weight, and maximum color of 10 Hazen.

- **Vinyl acetate monomer:** Minimum purity of 99.9%, maximum water content of 400ppm.

### Purified Terephthalic Acid (PTA)

**Assessment:** PTA FD NWE monthly contract price is assessed at 0.66\* PX industry-settled monthly European contract price plus fixed premium of Eur140/mt.

**Timing:** NWE monthly contract prices.

**Basis and Location:** FD NWE in Euro/mt.

**Standard cargo size:** 300-2,000mt.

**Product Specifications:** Minimum purity of 95%.

### Acrylonitrile (ACN)

**Assessment Window:** Spot assessments are based on the latest information from the market up to the close of the assessment window at 4:30 pm London time on Tuesday.

**Timing:** Material loading 3-30 days forward from the date of publication.

**Basis and Location:** CIF ARA in \$/mt.

**Standard cargo size:** Minimum 500mt.

**Product Specifications:** Minimum purity of 99.4%, maximum water content of 0.5%, and maximum non-volatile bases content of 100ppm.

## SOLVENTS

Assessment	CURRENCY	CODE	Mavg	Wavg	CUR CONV	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	PC Page		
													CONV	CODE	Mavg
<b>Hydrocarbon Solvents</b>															
Solvent Naphtha FD NWE Weekly	EUR	HPAGN00	HPAZI03			Spot	FD	NWE	3-30 days forward	20		MT	PC370	PC0446	
Solvent Naphtha FOB Rotterdam Weekly	USD	PHAG000	PHAZH03			Spot	FOB	Rotterdam	3-30 days forward	500	1000	MT	PC370	PC0446	
Solvent Toluene FD NWE Weekly	EUR	HPAFN00	HPAZK03			Spot	FD	NWE	3-30 days forward	20		MT	PC370	PC0446	
Solvent Xylene FD NWE Weekly	EUR	HPAGC00	HPAZP03			Spot	FD	NWE	3-30 days forward	20		MT	PC370	PC0446	
White Spirit FD NWE Weekly	EUR	HPACS00	HPAZT03			Spot	FD	NWE	3-30 days forward	20		MT	PC370	PC0446	
White Spirit FOB Rotterdam Weekly	USD	PHACT00	PHAZS03			Spot	FOB	Rotterdam	3-30 days forward	500	1000	MT	PC370	PC0446	
Hexane Special Grade FD NWE Weekly	EUR	HPACX00	HPAZV03			Spot	FD	NWE	3-30 days forward	20		MT	PC370	PC0446	
Hexane Special Grade FOB Rotterdam Weekly	USD	PHACZ00	PHAZU03			Spot	FOB	Rotterdam	3-30 days forward	500	1000	MT	PC370	PC0446	
<b>Oxygenated Solvents</b>															
Acetone T2 FD NWE Weekly	EUR	HPADN00	HPAYQ03			Spot	FD	NWE	3-30 days forward	20		MT	PC378	PC0447	
Acetone T2 FOB Rotterdam Weekly	USD	PHAD000	HPAYP03			Spot	FOB	Rotterdam	3-30 days forward	500		MT	PC378	PC0447	
Butyl Acetate FD NWE Weekly	EUR	HPAEJ00	HPAZE03			Spot	FD	NWE	3-30 days forward	20		MT	PC378	PC0447	
Butyl Acetate FOB Rotterdam Weekly	USD	PHAEK00	PHAZD03			Spot	FOB	Rotterdam	3-30 days forward	500		MT	PC378	PC0447	
Ethyl Acetate FD NWE Weekly	EUR	HPAED00	HPAZA03			Spot	FD	NWE	3-30 days forward	20		MT	PC378	PC0447	
Ethyl Acetate FOB Rotterdam Weekly	USD	PHAE000	PHAZB03			Spot	FOB	Rotterdam	3-30 days forward	500		MT	PC378	PC0447	
IPA FD NWE Weekly	EUR	HPADE00	HPAYF03			Spot	FD	NWE	3-30 days forward	20		MT	PC378	PC0447	
IPA FOB Rotterdam Weekly	USD	PHADF00	HPAYE03			Spot	FOB	Rotterdam	3-30 days forward	500		MT	PC378	PC0447	
MEK FD NWE Weekly	EUR	HPADR00	HPAYS03			Spot	FD	NWE	3-30 days forward	20		MT	PC378	PC0447	
MEK FOB Rotterdam Weekly	USD	PHADS00	HPAYR03			Spot	FOB	Rotterdam	3-30 days forward	500		MT	PC378	PC0447	
Phenol FD NWE Weekly	EUR	HPAGF00	HPAYJ03			Spot	FD	NWE	3-30 days forward	20		MT	PC378	PC0447	
Phenol FOB Rotterdam Weekly	USD	PHAGG00	HPAYI03			Spot	FOB	Rotterdam	3-30 days forward	500		MT	PC378	PC0447	

## Solvents

### Hydrocarbon Solvents

**Assessment Window:** Spot assessments are based on the latest information sourced from the market up to the close of the assessment window at 4:30 pm London time Tuesday.

**Timing:** Assessments reflect material for delivery or loading 3-30 days from the day of publication. In the absence of spot indications the FOB barge market is assessed as a premium to related upstream products.

**Basis and Location:** Spot prices are assessed in Eur/mt FD NWE and in \$/mt FOB Rotterdam.

**Standard cargo size:** Minimum 20 mt for FD NWE, 500-1,000 mt for FOB Rotterdam.

#### Product Specifications:

- **Solvent Naphtha:** Minimum density of 0.870 g/ml at 15 degrees Celsius, minimum total aromatics content is 99% and maximum water content is 0.03%.
- **Solvent Toluene:** Product must conform to ASTM D-841.

- **Solvent Xylene:** Product must conform to ASTM D-843 with one or more isomers removed.
- **White Spirit:** Minimum density of 0.770 g/ml at 15 degrees Celsius, minimum aromatics content of 15% and a distillation range of 145-200 degrees Celsius.
- **Hexane:** Minimum C6 (hexane, isomers, and methylcyclopentane) content of 98%. Product should have a minimum n-hexane content specification of 45%. Maximum benzene content of 50ppm and a maximum sulfur content of 200ppm. Minimum boiling temperature of 65-70 degrees Celsius for food grade, 60-95 degrees for adhesive grades.

### Oxygenated Solvents

**Assessment Window:** Spot assessments are based on the latest information sourced from the market up to the close of the assessment window at 4:30 pm London time Tuesday.

**Timing:** Assessments reflect product for delivery/loading 3-30 days forward from the day of publication.

**Basis and Locations:** Eur/mt FD NWE and \$/mt FOB Rotterdam.

**Standard cargo size:** Minimum 20 mt for FD NWE, minimum 500

mt for FOB Rotterdam.

#### Product Specifications:

- **Isopropyl alcohol:** Maximum aromatics volume of 100ppm, maximum sulfur content of 1ppm and minimum product purity of 50%. Minimum alcohol content is 99.5%, and maximum water content is 0.3%.
- **Phenol:** Minimum purity of 99.9% and maximum water content of 0.08%.
- **Acetone:** Minimum acetone content of 99% and maximum water content of 0.35%
- **Methyl Ethyl Ketone (MEK):** Minimum MEK content of 99% and maximum water content of 0.1%
- **Ethyl acetate:** Minimum purity of 99.5%, maximum water content of 0.05%, and maximum alcohol content of 0.04%.
- **Butyl acetate:** Minimum purity of 98%, maximum water content of 0.05%, and maximum alcohol content of 0.5%.



## CHLOR ALKALI

Assessment	CURRENCY	CODE	Mavg	Wavg	CUR CONV	CONTRACT TYPE	CONTRACT BASIS	LOCATION	DELIVERY PERIOD	MIN SIZE	MAX SIZE	UOM	CONV	PC Page CODE	Mavg	Wavg
<b>Chlorine</b>																
Chlorine FD NWE Weekly	EUR	AANTE00				Contract	FD	NWE	Current month	500	1000	MT		PC391		
<b>Caustic Soda</b>																
Caustic Soda FOB NWE Weekly	USD	AANTF00	AANTF03	AANTF00		Spot	FOB	Rotterdam	3-30 days forward	10,000		MT		PC391	PC0380	
Caustic Soda FD NWE Weekly	EUR	AANTG00				Contract	FD	NWE	Current month	5000		MT		PC391		

### Chlor Alkali

#### Chlorine

**Assessment Window:** Assessments are based on the latest information sourced from the market up to the close of the assessment window at 4:30 pm London time Tuesday. Contract price assessments are made once a month on the first Tuesday of the month and are published weekly.

**Timing:** Month of publication.

**Basis and Locations:** Intra-European monthly contract price on FD Northwest Europe basis in Eur/mt.

**Standard cargo size:** Contract material is delivered ex-pipeline in parcels of 500-1,000mt.

**Product Specifications:** Liquid/gas chlorine with a minimum purity of 99.5% by volume, moisture of 50 max ppm by weight.

#### Caustic Soda

**Assessment Window:** Assessments are based on the latest information sourced from the market up to the close of the assessment window at 4:30 pm London. Assessments for the contract price are made once a month on the first Tuesday of the month.

**Timing:** Material loading 3-30 days forward from the date of

publication. The contract price reflects material delivered during the month of publication.

**Basis and Locations:** (1) Weekly spot export prices on a FOB Rotterdam basis in \$/mt. (2) Monthly intra-European contract price on an FD basis in Eur/mt.

**Standard cargo size:** FD assessments reflect parcels of at least 5,000 dry metric tons in the European distribution market. FOB quotes are for bulk export cargoes with a minimum size of 10,000 dmt.

**Product Specifications:** Assessments are for caustic soda solution 50% commercial grade (membrane or diaphragm).

## Liquid (easy) and gas chemicals freight

Platts assesses freight rates for liquid chemicals and gas chemicals in Europe. 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](https://www.spglobal.com/platts/plattscontent/_assets/_files/en/our-methodology/methodology-specifications/freight-methodology.pdf)

## Platts global petrochemical indices

**Indices:** Platts publishes the following petrochemical indices daily, 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 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.

## APPENDIX

### TDI-grade toluene specifications

Platts' toluene diisocyanate-grade (TDI-grade) toluene assessments reflect the below specifications, designated under ASTM D5606:

Property:	Specifications:
Purity, min, wt%	99.9
Acid wash color, max	pass with 2
Benzene, max, mg/kg	300
Nonaromatics, max, wt%	0.1
Ethylbenzene, max, mg/kg	300
Xylenes, max, mg/kg	500
Appearance	Clear liquid free of sediment and haze when observed at 18.3 to 25.6 C (65 to 78 F).
Color, max, Pt-Co scale	10

### MX specifications

Platts' European mixed xylenes assessments reflect the below specifications:

Property:	Specifications:
Non aromatics content, max	2%
Ethylbenzene content, max, vol	20%
Color, max, Pt-Co scale	20
Distillation range, max	5 Celsius
Initial distillation temp, min	137 Celsius
Dry point, max	143 Celsius
Acid wash color, max	pass with 6
Copper corrosion, max	pass (1A or 1B)
Appearance	Clear liquid free of sediment and haze when observed at 18.3 to 25.6 C (65 to 78 F).

**ETBE Sustainability Criteria:** The European Commission has, through its Directive 2009/28/EC, spelt out guidelines on the

promotion of the use of energy from renewable sources by 2020. Specifically, it endorsed a mandatory 10% minimum target to be achieved by all Member States for the share of renewable sources in transport petrol and diesel consumption by 2020. Following developments on the implementation of the directive at the member-state level, from January 3, 2012 Platts only reflects bids, offers and expressions of interest to trade in its Market on Close assessment process for product that satisfies the sustainability criteria defined in the article 17 of the directive. The sellers are required to demonstrate compliance with the provisions of the directive by supplying proof of sustainability issued either by any of the voluntary schemes approved by the European Commission or by an independent audit performed in accordance with the guidelines referred to in the directive and prescribed by national requirements of respective member state(s).

**Right to audit:** The buyer holds a right to audit the sustainability documentation for the sole purpose of determining the validity and veracity of these documents.

## REVISION HISTORY

**May 2019:** Platts discontinued publishing the industry-settled styrene FOB ARA monthly contract price. Platts discontinued the monthly average of its methanol FOB Rotterdam weekly calculation. 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.

**March 2019:** Platts discontinued the ACN CIF MED assessment due to low liquidity.

**February 2019:** Platts introduced new food grade pellet recycled PET assessments.

**December 2018:** Platts clarified Eurobob gasoline codes used for mixed xylene, toluene assessments.

**December 2018:** Platts moved chemicals freight methodology and tables to Freight methodology and specifications guide.

**October 2018:** Platts updated the Aromatics and methanol table to correct the incoterm listed for Methanol T2 FOB Rotterdam quarterly contract.

**August 2018:** Platts updated the Aromatics and methanol table to correct the code listed for Mixed Xylene CIF ARA, the currency for Methanol T2 FOB Weekly Rotterdam and the contract type for Paraxylene FOB ARA Mo02. Platts also updated the Gasoline components table to include the full assessment descriptions for MTBE FOB ARA factor, ETBE FOB AR, ETBE Premium FOB AR, Raffinate-1 CIF NWE Weekly and Raffinate-1 CIF NWE Factor Weekly.

**July 2018:** Standardized the wording around industry-settled contract prices across the olefins, aromatics and methanol sections, and clarified that Platts will not publish a contract price if a full settlement is not reached. References to Platts currency conversions of industry-settled CPs were removed from the text and added to tables as needed.

**May 2018:** Platts updated the section "Aromatics MOC window guidelines" to include revised expectations surrounding vessel performance in its CIF ARA aromatics assessment windows.

**May 2018:** Platts corrected the April 2018 revision history to remove an erroneous reference to PCA Guidelines. The April 2018 update had incorrectly stated that text had been moved to the PCA Guidelines document during the annual methodology review.

**April 2018:** As part of the annual methodology review, we simplified language and deleted/moved repetitive language on normalization, which is included in Parts I-VI.

**April 2018:** Platts moved publication of EDC/VCM assessments in Europe to Tuesday from Thursday.

**April 2018:** Platts amended the codes listed for its Propylene Contract Price Indicator.

**January 2018:** Platts amended intermediates methodology for PTA and PA. Platts harmonized toluene and mixed xylenes assessments by discontinuing nitration grade toluene and solvent grade MX.

**November 2017:** Platts launched CIF ARA mixed xylene month 1 and month 2 assessments, and toluene and mixed xylene month 1 and month 2 spreads to corresponding Eurobob gasoline FOB ARA swaps.

**September 2017:** Platts launched CIF ARA toluene assessments and tied its existing FOB ARA prices to the CIF ARA value.

**August 2017:** Platts clarifies vessel performance in European CIF ARA aromatics MOC window guidelines.

**July 2017:** Platts to assess CFR Turkey polymer prices exclusive of duty. Platts clarifies FOB specifications for styrene butadiene rubber and revises vinyl content for SBR.

**June 2017:** Platts updated the codes for Platts cracker margins.

**April 2017:** [Annual Review] Platts launched MX CIF ARA assessment and tied its existing FOB ARA prices to the CIF ARA value. Platts revised the MOC guidelines for CIF markets allowing bids and offers for dated barrels in no shorter than 10 day strips. Platts also revised its approach to aromatics contract price publication in case of split settlements. In addition, Platts added a gas chemical freight methodology to complement the existing easy liquid freight methodology.

**January 2017:** Platts to no longer take price deltas into consideration for assessing European polymer contract prices.

**December 2016:** Platts discontinued several chemical freight assessments, including for freight rate for liquid chemicals from Europe to Brazil and for VCM freight routes from Europe and the US to Turkey.

**November 2016:** Platts discontinued the styrene FCA Rotterdam truck contract price. Platts launched benzene month-ahead contract price indicator.

**June 2016:** Platts launches C2,C3 month gross contract price assessments. Platts also launched M1,M2 spot price assessments for European C2,C3. Platts revised aromatics MOC window guidelines on loading/delivery dates.

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

**February 2016:** [Annual Review] Platts clarified the loading dates for EDC/VCM and minimum/maximum quantity for DEG. Platts clarified that PVC CFR Russia is also assessed in \$/mt. Platts clarified that Raffinate is assessed as CIF NWE. Platts updated hexane specifications to reflect a methodology change regarding benzene and sulphur content.

**February 2016:** Platts clarified the loading dates for EDC/VCM and minimum/maximum quantity for DEG. Platts clarified that PVC CFR Russia is also assessed in \$/mt. Platts clarified that Raffinate is assessed as CIF NWE. Platts updated hexane specifications to reflect a methodology change regarding benzene and sulphur content.

**August 2015:** Platts clarified minimum and maximum volumes for spot polymer assessments. Platts clarified delivery period for contract polymer assessments is the month of publication. Platts clarified it also used butadiene in the contract cracker margin calculations. Platts clarified loading period and standard parcel volumes for MTBE. Platts clarified loading/delivery period for acetic acid, VAM and oxygenated solvents. Platts added basis location for FD and CIF NWE assessments of ethylene and propylene.

**April 2015:** Platts discontinued publication of acetone T1, MIBK and benzene forward quarterly assessments. Platts also

discontinued publication of the hydro xylene FOB ARA code (PHAGD00) and replaced it with mixed xylene code (PHAAW00). Platts introduced spot assessments for LLDPE standard C6 (AAQCY00) and metallocene C6 (AAQCZ00).

**March 2015:** Platts clarified European polymer contract price assessments by further defining the parameters. Platts added 'spot' in PET and ABS cargo sizes.

**February 2015:** Platts changed the frequency of the mixed xylenes and orthoxylene assessments to daily.

**January 2015:** Platts discontinued dioctyl phthalate assessments from January 2, 2015 and revised the specifications of the mixed xylenes reflected in the virgin/isomer and solvent grade xylenes. Platts reduced the ethyl-benzene content to a maximum of 20% from previous 55-60%, eliminated the limits on metaxylene, paraxylene and orthoxylene, which were previously set at 15-20%, and reduced the non-aromatics

content to 2% from 4% maximum for solvent grade. For isomer/virgin grade Platts increased the non-aromatics content to 2% from previously set 1%.

**November 2014:** Platts amended olefins, aromatics and methanol contract price methodology. Platts publishes contract price settlements once it has obtained information that two buyers and two sellers have agreed the same price.

**August 2014:** Platts revamped all Petrochemical Methodology and Specifications Guides, including its European 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.