

RISING MONOMER PRICES MIXED POLYMER PRICE MOVEMENTS

WEEK 14, 07. 04. 2024

GENERAL OVERVIEW

The prices of “commodity” polymers were affected by the following factors last week:

- **BRENT oil price** (05.04.2024) **88.92** USD/barrel, slightly rising prices compared to the end of the previous week
- **NAPHTHA European**; (05.04.2024) **698.70** USD/t, decreasing prices compared to the end of the previous week,
- **April contract monomer prices:**
 - **Ethylene (C2)** contract price **+40 EUR/t (1,260 EUR/t)**,
 - **Propylene (C3)** contract price **+45 EUR/t (1,145 EUR/t)**,
 - **Styrene monomer (SM)** contract price **+44 EUR/t (1,821 EUR/t)**,
- **Dutch TTF Gas Futures** (05.04.2024) **26.720** EUR/Mwh, slightly decreasing prices compared to the end of the previous week,
- **EUR/USD** (05.04.2024): **1.083** strengthening of the euro compared to the previous week,
- **Polymer capacity news**
 - Persistent production problems
 - **Karpatneftekhim** (Kalush, unplanned shutdown, HDPE 110 kt/year capacity)
 - Entering capacities:
 - After the trial production, the PP factory of **Grupa Azoty Polyolefins** with a capacity of 400 kt/year in Police (Poland) was restarted. Grupa Azoty Polyolefins plans to reach 70% of nominal capacity in the first quarter of 2024. Then, by the end of the third quarter, it will reach the maximum capacity planned for the entire new factory complex. Two homopolymer grades (MFR 3 and 3.5) are now regularly available.
 - Ongoing maintenance/outages/malfunctions:
 - **MOL Group** - Slovnaft unplanned shutdown at the **LDPE-4** plant (220 kt/year LDPE capacity), the shutdown is expected to last 7-9 weeks. Due to the shutdown, the capacity of both the Bratislava Steam-cracker and the PP plant was reduced. A restart is expected in the week ahead.
 - **Romp petrol** is still standing due to monomer supply problems at the LDPE plant (LDPE capacity of 60 kt/year), a restart is only expected if market prices ensure profitable operation from purchased ethylene.
 - **MOL Group** – production problems at the LDPE plant of MOL Petrochemicals in Tiszaújváros (65 kt/year capacity).
 - **MOL Group** – production problems at MOL Petrochemicals HDPE plant in Tiszaújváros, selective FM for certain grades.

- **MOL Group** - production problems at the PP(4) plant of MOL Petrochemicals in Tiszaújváros (180 kt/year capacity), cracking problems are in the background. The plant is expected to start up again in the week ahead.
 - Expected maintenance/outages:
 - **Orlen-Unipetrol** planned shutdown in Litvínov in April 2024 (PP capacity 280 kt/year), the expected duration of maintenance is 18-20 days.
 - **Orlen-Unipetrol** planned shutdown in Litvínov from April 8, 2024 (270 kt/year HDPE capacity), the expected duration of maintenance is 30 days.
 - Due to **Rompertrol** refinery maintenance, PP production in Navodari will stop between March 10 and May 6, 2024 (90 kt/year **PP** capacity affected)
 - Planned shutdown at **Orlen** in May, in Plock, (100 kt/year LDPE capacity) planned duration is 3 weeks.
 - **HIP-Petrohemija** planned maintenance in Pancevo between March 11 and April 25, 2024 (60 kt/year **LDPE** and 90 kt/year **HDPE** capacity affected)
 - **Versalis – Dunastyr** planned maintenance in Százhalombatta between May 22 and June 20, 2024 (60 kt/year **EPS**, 80 kt/year **HIPS** capacity affected)

There was just a low number of transactions last week. This is due to the Easter holidays on the one hand, and the uncertain price situation on the other. The prices of ethylene and styrene monomers were only published on Tuesday, as a result of which most polymer producers only came out with their April prices on Wednesday and Thursday of the last week. In the first round, most European manufacturers tried to enforce the moderate monomer price increase in polymer prices. However, there were some Central European polymer producers who made a price reduction of €50-€100 compared to the beginning of March. With this step, on the one hand, they thoroughly surprised their competitors, and on the other hand, they confirmed the converters' preliminary price expectations. After that, the polymer manufacturers who raised prices will probably have to back down. That is why, by Friday of the last week, the expectation that a smaller price drop in roll-over was the acceptable price scenario for April had become common.

Converters are precautionous with purchases, demand traditionally falls after the Easter season. The incoming orders are also short-term, the majority of the converters only see a month in advance at best. That is why even the larger converters mostly buy on a prompt basis, mostly to cover incoming and predictable orders. This attitude is accompanied by the expectation of a falling price trend. This will further reduce demand. Since April is a short month, next week's prices will be decisive in terms of sales. This means that those who cannot find a price level acceptable to their customers next week will only be able to sell at a significant discount in the second half of April.

Several converters expect that new import shipments will arrive at the end of April and beginning of May, and that they will push European prices down.

POLYETHYLENE GRADES

In the first week of April, **LDPE prices ranged from € 1,250 to € 1,420/t**. The lower value of the price band was represented by imports from outside Europe - primarily MFR 2 grades, while the upper value was represented by European grades. The upper value of the price range has increased, some Western European

manufacturers have raised their prices. In the meantime, two Central European manufacturers also announced significant price reductions of 50 euros or more. Converters are waiting for now, purchases are planned for the week ahead. For the time being, the availability of MFR 0.3 grades is limited, but it is expected that the Slovnaft LDPE plant will start continuous production in the coming week, so there will be availability again in April. According to converters, the realistic price level should be around €1,320±30/t.

The following table shows the typical prices of the last week in Central Europe, €/t (full truckload 20-22.5 t):

	TYPICAL polymer price bands in the first week of MARCH 2023	TYPICAL polymer price bands in the last week of MARCH 2024	TYPICAL polymer price bands in the first week of APRIL 2024	Price band change (first week of April - first week of March)	EXPECTED polymer price bands in the second week of APRIL 2024
LDPE Film	1280-1510	1250-1400	1250-1420	-30/-90	1250-1400
LDPE GP	1280-1500	1250-1400	1250-1420	-30/-80	1250-1400

In the first week of April, the typical price range in the MFI 0.6-1 transparent/translucent segment was **€780-1,160/t**. The typical transaction price range was between €820-920/t, unchanged. The Easter break also reduced demand. There was just a low number of transactions last week. Due to falling virgin LDPE prices, it is unlikely that recycled rLDPE prices will be able to rise further.

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rLDPE (MFI 0,6-1)	820-1160	800-1160	780-1160	-40/0	780-1160

In the first week of April **HDPE prices** were in a range of **1,180-1,490 €/t**, scattered in a wide range. The upper value of the price range has increased, some Western European manufacturers have raised their prices. In the meantime, two Central European manufacturers also announced significant price reductions of 50-100 euros. The lower value of the price range is related to imports from outside Europe and to the prices of Central European producers in the southern (SCE) and central (MCE) regions. Despite the low prices, few transactions have taken place so far, converters are waiting for the final April prices to be established. The week ahead is likely to be the strongest demand period in April. Polymer manufacturers also know this, so we expect price corrections in the case of higher prices.

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HDPE BM	1270-1420	1200-1420	1180-1450	-90/30	1180-1450
HDPE Film	1270-1500	1220-1450	1190-1490	-80/-10	1190-1490
HDPE IM	1310-1400	1250-1400	1210-1430	-100/30	1200-1430

In the first week of April, **HDPE-100 (Black & colored)** prices were in a range of **1,290-1,480 €/t**. These prices are still at the end of March, so far the majority of polymer manufacturers have not yet published their prices. For now, the groping is in progress. It will certainly be difficult to have the price increase accepted, but the intention of the polymer manufacturers seems to be united, so even if a price increase of 40 euros is unlikely, 20-30 will probably be accepted by the market. The price increase can only be prevented by a potentially larger import shipment, but its arrival in April is unlikely.

For natural pipe grades, list prices were close to or above €1,300. These prices are higher than the spot prices at the end of March. Therefore, no transactions have taken place yet. Converters are waiting for a better offer, but the purchase is not urgent either, since most of them did their shopping at the end of March.

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HDPE Pipe (100)	1310-1480	1290-1480	1290-1480	-20/0	1300-1450

In the first week of April, **LLDPE C4** prices were in a range of **1,150-1,300 €/t**. Compared to the end of March, the price range has widened. Below €1,200 there are typically North American and Middle Eastern import grades. Demand is weak, few transactions have taken place. In the past week, the effect of the Easter holidays was felt. A minor pick-up in demand is conceivable in the week ahead.

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LLDPE C4	1250-1420	1190-1350	1150-1300	-100/-120	1150-1300

In the first week of April, the range of **(m)LLDPE (C6)** prices was **1,250-1,550 €/t**. The price of LLDPE C6 was in the price range of **1,250-1,350 €/t**, while that of **mLLDPE** was in the price range of **1,300-1,550 €/t**. In the case of undoped C6 grades, the prices have risen by around 30 euros compared to the price at the end of March. At the same time, availability seems to have narrowed. An interesting market situation arose in the case of metallocene grades after the largest European manufacturer announced an 'order-stop' for certain grades. As a result, at the end of the last week, a feeling of shortage developed in the market. It is not yet clear whether we are talking about an actual shortage? Demand has so far been weak for both grades. We will see the final prices and demand level in the week ahead.

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(m)LLDPE (C6)	1260-1520	1220-1520	1250-1550	-10/30	1250-1550

POLYPROPYLENE GRADES

In the first week of April, **PPH Raffia** prices were in the range of **€1,200-1,400/t** in Central Europe. Apparently, the price band has hardly changed, but within the price band there are significant changes. Some Central European manufacturers implemented a price reduction of 50 euros, while Western European manufacturers tried to increase their prices by 45-70 euros. Several polypropylene manufacturers have limited availability, so it is questionable whether they want to go in the direction of price correction. This will become clear in the coming week, those who have sellable commodities will probably adjust back to roll-over. Presumably, the larger converters will be able to lower the prices below €1,200, close to €1,150, especially for the thermoforming grades. It follows from all this that it is highly likely that the broad price bands will remain with us in April.

The following table shows the typical prices of the last week in Central Europe, €/t (full truckload 20-22.5 t):

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PPH Raffia 1250-1350 1150-1400 1200-1400 -50/50 1150-1400

In the first week of April, the prices of **PPH IM** non-specialty grades with low and medium melt flow index were in a range of **1,235-1,400 €/t** and the prices of PPH IM with high melt flow index were in a range of **1,250- 1,470 €/t**. The lower value of the price band has increased, the upper value is apparently unchanged compared to the previous week. However, significant changes took place within the price range. There were Central European manufacturers who implemented price reductions and others roll-over. However, the majority of Western European manufacturers rather raised prices. At the moment, it is not known how successful it will be. The converters have not bought yet in the last week, they are waiting for the final April prices to develop. Price corrections are likely on Monday, except for grades with limited availability. This means that the wide price range will remain with us in April.

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PPH IM	1330-1350	1200-1450	1235-1400	-95/50	1200-1400
PPH IM HMF	1340-1420	1200-1470	1250-1470	-90/50	1200-1470

In the first week of April typical **PPC prices** were in a range of **1,300-1,480 €/t** in Central-Europe. The upper value of the price band increased compared to the end of March. Significant changes and shifting took place within the price range as well. There were Central European manufacturers who reduced prices, but the majority of Western European manufacturers increased prices by 45-70 euros, while import prices remained unchanged. Converters want to buy at or below €1,400. At the moment there is no strong impulse to buy, as most companies have stocks until the end of the month and their backlog is not large.

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PPC	1320-1510	1300-1470	1300-1480	-20/-30	1300-1450

In the first week of April, the typical prices of MFI (8-15, 15-20) re-granulates (PCR) of good quality, homogeneous color and narrow flow index range were in a range of **€680-1,000/t**. Prices have not changed compared to the previous week. Last week, demand was weak, the Easter holidays were still in place. The price of MFI (25-35) grades of more consistent quality and high flow index, light color - typically based on



PIR - is between **€950-1,100/t**. The lower value of the price band increased compared to the previous week. This indicates a pick-up in demand or limited availability.

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rPP	680-1050	680-1100	680-1100	0/50	680-1100

In the first week of April, **PPR** prices ranged from **€ 1,350 to € 1,600/t**. The upper value of the price band increased compared to the end of March. Significant changes and shifting took place within the price range as well. There were Central European manufacturers who reduced prices, but the majority of Western European manufacturers rather increased prices by 35-70 euros. In addition, the prices of customers with a price formula also increased. The final Central European prices are expected to be established in the week ahead.

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PPR	1350-1550	1350-1550	1350-1600	0/50	1350-1600

POLYSTYRENE

In the first week of April, typical **EPS (white)** prices were in a range of **€ 1,800 - 1,950/t**. Not all European EPS manufacturers have announced their April prices yet. Those who announced increased their prices by 40-70 €/t. For now, it is difficult to judge the demand for April. Many converters expect that prices have reached their peak, and SM and EPS price declines should follow in May. Those who ordered EPS from Iran at the beginning of February expect the shipments to arrive at the beginning of May, so they are not planning any major purchases in April either.

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EPS	1790-1850	1800-1900	1800-1950	10/100	1800-1950

In the first week of April, **GPPS** prices ranged from **1,500 to 2,000 EUR/t**. Typical **HIPS** prices were in a range of **1,600-2,100 EUR/t**. The lower value of the price bands is still represented by non-European (Iranian) import grades in the southern (SCE) and northern (NCE) regions. The price of the Egyptian grades is typically 100 euros above the Iranian prices. The upper value of the price bands increased, as European manufacturers raised their prices by 40-70 euros. It is not yet known with what degree of success. Since the price bands have expanded in an extreme way, this will probably reduce demand. There have been no transactions in the past week, but the most likely transaction price range will be between 1,800-1,900 for the European GPPS and 1,900-1,990 for the European HIPS. For now, demand is still questionable as prices seem to have peaked.

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GPPS	1870-1950	1500-1950	1500-2000	-370/50	1500-2000
HIPS	1950-2050	1600-2050	1600-2100	-350/50	1600-2100

In the first week of April, the range of natural **ABS** prices was **1,680-2,250 EUR/t**. European manufacturers implemented a price increase of between 40-70 euros, thereby significantly increasing the upper value of the price range. The lower value of the price range is represented by import grades from outside Europe, primarily from the Far East. The demand is basically weak, and the wide price ranges make the buyers uncertain. As a result, weak demand can be expected in April.

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ABS (natural)	1750-2150	1750-2150	1680-2250	-70/100	1680-2250



POLYETHYLENE TEREPHTHALATE

In the first week of April, virgin **PET Bottle grades** prices were between **€1,100-1,200/t**. Compared to the previous week, the price bands have not changed. However, according to market players, the slow erosion of prices has started, the average prices have decreased by around 20 euros. In the case of European-made grades, most transactions took place between €1,120-1,170/t.

In the case of rPET, the price of 'clear food-grades' was in the range of €1,250-1,510/t, due to the Easter holidays there were few transactions.

In the case of colored mixed rPET, the prices were scattered in a wide range of €600-800/t. Few transactions took place due to the Easter holidays.

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PET bottle grade	1120-1200	1100-1200	1100-1200	-20/0	1100-1200

POLYVINYL CHLORIDE

In the first week of April, European-made PVC (K67-68) prices were between €860 and €990/t. For now, these are the prices at the end of March. For now, the European manufacturers have not come out with their prices yet, and are only testing the market. The intention is clearly to raise prices, they must pass on the increased production costs. However, converters are more inclined to roll-over due to weak demand. The market will probably be characterized by smaller price increases and flexibility in April.

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S PVC powder	850-990	860-990	860-990	10/0	860-990