bvse market report on plastics, November 2018

0 The general economic situation of the plastics industry

The mood among German company managers is deteriorating. The ifo business climate index, cf. www.cesifo-group.de, fell from (seasonally adjusted) 102.9 points in October to 102.0 points in November. This is the third decline in succession. Companies assess their current situation as worse, albeit based on a still high level. Their expectations have also deteriorated. Along with other indicators, this shows that there will be an 0.3 % economic growth rate in the fourth quarter. The German economy is cooling off. In the processing industry the climate has once again deteriorated. This development has been fueled by markedly less positive assessments of the overall situation. Expectations have also been lowered. Only very few industrial companies are expecting an improvement over the next six months. Nevertheless, prices are likely to be raised more and more.

The strong dollar (1.134 $ to the euro on 26 November 2016) and low crude oil prices (58 $/barrel on 26 November 2016) will have an impact on plastics prices shortly. At present precursor prices are falling considerably. While olefin agreements made only slight losses (-10 €/t) in October, styrene in particular (-150 €/t) was listed at markedly lower prices. Overall, the impending winter break and the decline in the plastic processors' demand indicate further price falls in standard and technical plastics alike. However, structural shortages may lead to some listings deviating from the general trend, cf. PVC and PET.

1 The primary plastics market

1.1 Standard plastics:

The Plasticker Price Index for October 2018 shows average listings to have reached 1331 €/t. And thus, the average listings fell by 18 €/t compared to the preceding month, cf. Table 1. The price falls refer to LDPE (- 20 €/t), PE (- 20 €/t) and PS (-70 €/t). The 60 €/t price rise in PS reached in the previous month was not maintained in October. However, the lower PS prices led to an increase in order placements during that month. The other plastics prices remained unchanged. Packaging PET was quoted at an average 1440 €/t in October 2018 and thus 40 €/t lower than in the previous month. Overall, demand for standard plastics is assessed as restrained. Markets are not expected to change considerably at the end of the year. A comparison between 2018 and last year shows that the average listing for October 2018 (1331 €/t) was almost equivalent to that reached in 2017 (1337 €/t).

Table 1: EUWID listings for standard plastics over the past five months; prices in €/t.

Prices in €/t	Oct. 2018	Sept. 2018	Aug. 2018	July 2018	June 2018
LDPE film grade	1240- 1350	1260- 1370	1280- 1390	1290- 1400	1310- 1460
LLDPE film grade	1220- 1340	1240- 1360	1260- 1380	1270- 1390	1290- 1440
HDPE injection moulding	1310- 1360	1310- 1360	1310- 1360	1310- 1360	1330- 1380
HDPE blow moulding	1330- 1380	1330- 1380	1330- 1380	1330- 1380	1350- 1400
PS crystal clear	1500- 1580	1570- 1650	1520- 1580	1500- 1560	1550- 1610
PS high impact	1600- 1680	1670- 1750	1620- 1680	1600- 1660	1650- 1710
PP homopolymer	1420- 1470	1420- 1470	1420- 1470	1420- 1470	1420- 1470
PP copolymer	1470- 1520	1470- 1520	1470- 1520	1470- 1520	1470- 1520
PVC tube grade	910- 970	910- 970	910- 970	910- 970	910- 970
PVC film/cables	960- 1010	960- 1010	960- 1010	960- 1010	960- 1010
Average Price	**1331 ± 222**	**1349 ± 240**	**1341 ± 223**	**1339 ± 219**	**1357 ± 232**

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1.2 Technical plastics:

In October 2018 technical plastics were listed at the same average price as in August, i.e. at 3044 €/t respectively, cf. Table 2. And thus, the average price in October 2018 (3044 €/t) exceeded that in October 2017 (2719 €/t) by as much as 325 €/t. Technical plastics prices are still at peak levels. Never before have technical plastics been as valuable as they are today.

The POM price has fallen by 50 €/t. Each of the PC types is listed 50 €/t higher in the upper margin. All other technical plastics prices have remained unchanged. As the automotive sector is deteriorating, demand for the last two months of 2018 is expected to fall. Demand for technical plastics was restrained in October.

Table 2: EUWID listings for technical plastics, which are published every two months, over the past six months; prices in €/t.

Prices in €/t	October 2018	August 2018	June 2018	April 2018
PMMA crystal clear	3450 – 3650	3450 – 3650	3450 – 3650	3450 – 3650
ABS natural	1920 – 1970	1920 – 1970	1950 – 2000	1950 – 2000
ABS white/black	2020 – 2070	2020 – 2070	2050 – 2100	2050 – 2100
ABS mixed colours	2620 – 2770	2620 – 2770	2650 – 2800	2650 – 2800
PC crystal clear	3650 – 3900	3650 – 3850	3650 – 3850	3650 – 3850
PC GF reinforced	3850 – 4100	3850 – 4050	3850 – 4050	3850 – 4050
POM natural	2050 – 2150	2100 – 2200	2100 – 2200	2100 – 2200
PA 6 natural/black	2500 – 2700	2500 – 2700	2500 – 2700	2500 – 2700
PA 6 GF reinforced	2600 – 2650	2600 – 2650	2600 – 2650	2600 – 2650
PA 66 natural	4000 – 4200	4000 – 4200	3800 – 4000	3450 – 3650
PA 66 GF reinforced	4050 – 4100	4050 – 4100	3850 – 4050	3500 – 3700
Average Price	**3044**	**3044**	**3023**	**2959**

2 The secondary plastics markets in the Plasticker Price Index

The plasticker internet platform, cf. http://plasticker.de, publishes quotes on an hourly basis. The present market report indicates the final monthly prices. It is only possible to represent the preliminary prices for November 2018. These listings thus merely reflect an interim situation that will not become definitive until the beginning of December, cf. the left-hand columns in Tables 3 and 4.

2.1 Standard plastics:

In October standard plastics were listed at 545 €/t and thus an average 10 €/t higher than in the previous month, when they were quoted at 535 €/t, cf. Table 3. The average price for October 2018 (545 €/t) exceeded that for the previous year (528 €/t) by 17 €/t. The following prices changed by more than ± 40 €/t: PP regrind - 50 €/t, PS regranulates - 50 €/t, PVC_P + 60 €/t, PVC_U + 50 €/t, PET bale goods + 70 €/t and PET regrind + 70 €/t.

PS regrind has reached a 26-month high at 670 €/t. PET regrind is listed at 410 €/t and has thus reached the highest level in 25 months. The October price index shows satisfactory to good demand for plastics compared to the previous month.

The preview of the November listings shows the average price, quoted at 551 €/t, to be 6 €/t higher than in the previous month, when it reached 545 €/t. To date, the price index of 16 November 2018 shows considerable demand for plastics.

Table 3: Listings for standard plastics in plasticker; prices in €/t.

	Nov.[6] 18	Oct. 18	Sept. 18	Aug. 18	July 18	Oct. 17
HDPE regrind[1]	560	570	590	570	580	560
HDPE regranulates[5]	850	890	860	850	930	870
LDPE bale goods[2]	220	240	210	190	200	200
LDPE regrind[1]	600	580	580	550*	550	630
LDPE regranulates[5]	740	770	780	770	800	740
PP bale goods[3]	170	150	140*	150*	140*	210
PP regrind[1]	560	540	590	600	540	520
PP regranulates[5]	900	810	800	840	890	800
PS regrind[4]	670	670	630	640	640	590
PS regranulates[5]	1050	980	1130	1110	1020	920
PVC_P regrind[1]	330*	390	330*	280*	300*	370*
PVC_U regrind[1]	470*	450	400*	410*	470	520
PET bale goods	220*	180*	110*	120*	180	160
PET regrind coloured	380	410	340	330	340	310
Average Price	**(551)**	**545**	**535**	**529**	**541**	**528**

*: Supply figure too low to attain statistical significance; [1]: equivalent to the grade 'post-industrial, mixed colours'; [2]: equivalent to K49; [3]: equivalent to K59; [4]: equivalent to 'standard, mixed colours'; [5]: equivalent to the grade 'regranulates, black'; [6]: preview that may be amended by additional quotes

2.2 Technical plastics:

There have been considerable price leaps in technical plastics: in October 2018 the average price of technical plastics in plasticker was listed at 1301 €/t and thus 58 €/t higher than in the previous month, when it had reached 1243 €/t, cf. Table 4. A comparison of the average price for October 2018 (1301 €/t) with that for the previous year (1228 €/t) shows the current price to be 73 higher.

The October price index shows satisfactory demand for technical plastics. The following prices changed by more than ± 70 €/t: PC regrind -90 €/t, PC regranulates + 360 €/t, PBT regranulates + 90 €/t, PA 6 regranulates +140 €/t and POM regranulates + 110 €/t. PC regranulates have reached a 16-month high at 2370 €/t. PBT regrind is listed at 1790 €/t and has thus reached the highest level in 14 months. The last time this price was paid for PA 6 was in December 2014.

Once again, prices have risen considerably: the preview of 16 November 2018 shows the average price, which has reached 1364 €/t, to be 63 €/t higher than in the previous month. To date, the November price index shows demand to be restrained. PA 6.6 regranulate prices are likely to rise to 440 €/t in November! POM regranulates, expected to reach 1890 €/t, will probably also attain a peak level that was last exceeded in November 2017.

Table 4: Listings for technical plastics in plasticker; prices in €/t.

	Nov.[6] 18	Oct. 18	Sept. 18	Aug. 18	July 18	Oct. 2017
ABS regrind	660	620	640	630	700	630
ABS regranulates[5]	1410	1440	1380	1370	1280	1250
PC regrind	830	840	930	1000	970	940
PC regranulates[5]	2240	2370	2010	1990	2070	2110
PBT regrind	600	460	460	450	450	440
PBT regranulates	1740	1790	1700	1640	1590	1630
PA 6 regrind	950	880	840	830	850	820
PA 6 regranulates[5]	1960	1920	1780	1780	1850	1680
PA 6.6 regrind	950	870	910	890	890	820
PA 6.6 regranulates[5]	2420	1980	1950	2010	2000	1760
POM regrind	720	650	640	660	600*	650

POM regranulates[5]	1890	1790	1680	1660	1710	2010
Average Price	**(1364)**	**1301**	**1243**	**1243**	**1247**	**1228**

[5]: equivalent to the quality grade 'regranulates, black; [6]: preview that may be amended by additional quotes.

3 Evaluation of the secondary plastics markets

A comparison of the information provided by EUWID and plasticker for October 2018 shows that the film grade prices listed in the EUWID Price Watch as a whole (PE, PP) rose slightly by an average 3 €/t compared to the preceding month. All other listings remained unchanged. There was also a slight rise in the prices listed by plasticker. According to plasticker, there was considerable demand for waste plastics in October. Recyclates were in great demand. However, according to EUWID, there were only very slight market fluctuations.

3.1 Waste plastics:

The disposal of used plastics is becoming increasingly difficult and, on top of all that, more expensive in Germany. It is hardly possible to shift used plastics to the Far East. It is easy to move plastics around within the European Single Market. Plastics processing is being expanded within the member states of Eastern Europe. Nevertheless, it is difficult to dispose of mixed plastic waste from the manufacturing and industrial sectors. The disposal of plastics from electrical and electronic equipment is becoming increasingly difficult; the same is true for plastics from shredder fractions.

The EUWID Price Watch for used plastics published in October 2018 only represents slight changes. According to EUWID, film grade was listed slightly higher. Post-user PE film prices rose by an average 3 €/t. PE film from post-industrial waste was quoted an average 2.50 €/t higher, while the prices of PP film made of post-industrial waste increased by 10 €/t.

The implementation of plastics recycling shows that post-user film can often only be sold at a supplementary payment of up to 50 €/t. The processors' demands concerning waste plastics make it necessary to separate them according to colour and type of plastic. Above and beyond this, waste plastics are to be kept tidy; contaminations and impurifications lower the quality of the waste to such an extent that it can hardly be processed. Furthermore, waste plastics are to be stored in a dry place. The waste plastic prices listed in the price indices only apply so long as recyclers are provided with sufficient quantities at a good quality.

3.2 Recyclates:

A large number of market participants are planning to expand the existing plastics recycling facilities. Plant purchases are leading to plastic recycling facilities being restructured and expanded. The aim is to considerably raise the proportion of recyclates that supplement primary goods. Nevertheless, any increase in plastics recycling leads to a rise in the quantity of mixed plastics for which the recycling channels need to be expanded. Plastic recyclates continue to be in good demand.

The developments in recyclate prices for regranulates and compounds are largely running parallel to those in virgin materials, cf. for example the price indices published by EUWID, KI Kunststoffinformation and plasticker. Overall, it is discernible that regranulates and compounds made of HDPE, PP and PS are listed at lower prices, while the listing for LDPE is higher. The prices of mixed recyclates cannot be determined because they are not traded freely on the market. The reason for this is that recyclers of mixed plastics directly process the material into semi-finished and finished products.

Even though the bottle quantity has been falling during the winter season, there is still a large supply of input among PET recyclers. However, it is hardly possible to expand warehouse stocks. There was a considerable supply of beverage bottles in October, which led to the prices of used bottles falling once again. The amount of bottles is expected to fall considerably in November. In October the prices listed for used PET beverage bottles changed as follows compared to the previous month: transparent PET (95/5 to 100) -7,50 €/t, mixed PET (70/30 to 90/10) -15 €/t and coloured PET (< 70/30) remained unchanged, PET recyclates are in good demand. And thus the prices of PET recyclates could be maintained in October, too, and that independently of the trend in virgin materials.

Since the beginning of the year, plastic recyclers have been pushing their plants to the limits of their capacity and have thus considerably contributed to reducing waste quantities. In November, plant operators have been waiting for the winter break in order to finally be able to conduct plant inspections. The warehouses for the plastic recyclers' plant input are provided with high-quality waste.

4 Explanatory information on the price listings

For a detailed analysis including information on price indices for virgin materials, used plastics and precursors, please go to EUWID Recycling und Entsorgung (Recycling and Waste Management), cf. www.euwid.de, or EUWID Plastics, www.euwid-kunststoff.de. EUWID: no guarantee for any of the prices. All EUWID prices are quoted ex works. As a rule, the prices quoted refer to quantities in excess of 20 tonnes.

The monthly quotes for **secondary plastics**, which are updated on an hourly basis, can be calculated using the price lists derived from the quotations published in the raw material exchange **plasticker** (www.plasticker.de). The prices listed in this index are quoted with reservation - as the majority of the quotes submitted are not necessarily equivalent to the sales prices. Plasticker offers the quality grades 'regrind' and 'regranulates' both as virgin materials and as secondary materials. The term 'bale goods' refers to waste plastics only. Furthermore, plasticker does not distinguish between the following grades: transparent, mixed colours or colour-separated. Therefore, the information provided by plasticker may indicate different market behaviour than the prices quoted by EUWID.

Bonn, Wednesday 28 November 2018 Dr. Thomas Probst, bvse