

Russian polystyrene market: shortage and rising prices

In 2020, the Russian market demand for polystyrene (PS), which has been declining steadily since 2013 due to its replacement with more environmentally friendly polymeric materials, soared amid the COVID-19 pandemic. Experts surveyed by CREON Group pointed out the growing popularity of PS against the backdrop of market deficits and rising prices.

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According to Rosstat, in seven months of 2020, 330.7 thousand tons of polystyrene (PS) were produced in Russia, which is 3.9% more than in the same period last year. In August, the Russian PS market experienced increased demand from processors, who reached full capacity after the pandemic and increased raw material purchases, as well as limited supply due to planned and unplanned shutdowns of manufacturing plants serving large contracts.

“There is a certain shortage in the Russian polystyrene market. Demand far exceeds supply, and prices have been growing by 5-6% for the second month already”, said a global manufacturer of disposable tableware and packaging for the catering market.

“The market is gradually stabilizing, but the shortage of raw materials is still noticeable - our giants used to stop plants for preventive maintenance in the summer. Now the demand has gone up, and there is a limited supply of raw materials”, commented the manufacturer of an expanded range of foaming polystyrene (PSV). “There has not been such a severe market deficit over the last five years. The situation is very strange, from time to time we have to look for raw materials across all regions”, said another large manufacturer of thermal insulation materials (TIM).

The opinion of the processors shares one of the largest traders of polymer products in Russia: “The raw material has to be booked in advance. And if previously even 20 tons could be sold to one client, now the volume is limited to 3-5 tons”. The trader believes that the supply of raw materials on the domestic market may be limited due to “the outflow of Nizhnekamskneftekhim (NKNC) volumes to the CIS countries and Europe, where’re greater attractiveness of the euro exchange rate.” However, NKNC denied this information: “Sanctions have been imposed on the company, so nothing goes for export. The plant fully meets the needs of the domestic market and its regular customers”.

Reasons for PS shortages

Experts interviewed by CREON Group consider the onset of the season and delayed demand as main reasons for the shortage of all types of polystyrene, due to which prices for products increased by an average of 30%, to 110-130 rubles with VAT per kg. “The resulting shortage is caused by the delayed demand; many customers didn’t work due to quarantine restrictions. High-cost import has an additional impact. The construction season is now underway, and everyone is trying to earn more, - commented one of the leading suppliers of polymer materials to the markets of Russia and the CIS. – I would like to believe that by winter prices will stabilize, there is no way to grow further”.

For ABS plastic, such fluctuations are not observed due to much smaller market volumes and initially higher product cost. “The ABS market is relatively stable, and we have not seen any significant price spikes over the past three months. It is certainly the coronavirus made work very difficult, but since June the situation has started to recover gradually, September is at the summer’s demand level and now there is a slight increase”, commented the European polyolefin producer.

Consumption segments

Despite the gradual removal of **food packaging** from polystyrene and its replacement with polypropylene, the demand for disposable packaging made from PSV increased during the observation period, breaking negative "environmental" trends for this market, said experts to CREON Group researchers. Now, there is a spike in the lunch boxes, as takeout food has become very popular. Compared to 2019, in 2020 pandemic the coffee lid was abandoned, but that volume of PS simply flowed into the foaming one. We plan to increase volumes of PSV due to increased demand", - said a large producer of plastic food packaging. Another major PS packaging manufacturer, made forecasts for the year, expecting "continued growth of foamed packaging by about 10-15%".

The greatest dynamics showed the **household appliances** producers, where, according to one of the traders, "consumption has grown three times, compared to June, end consumers purchased more "white" appliances after quarantine".

The segment of **packaging for household appliances** are actively in demand now and «should increase by about 15% by December» said the leading market player.

Extruded polystyrene foam (XPS) maintains a steadily growing demand in the **construction segment** for insulation and ceiling skirting boards: "Recently, there has been some compensation for the same elements for insulation. Perhaps people saved up in order to repair their homes. We have planned a 10% fall for the year, but now our figures indicate that we can reach break-even point, and this is not the worst result", - said the leading producer of decorative and finishing materials.

Polystyrene recycling

Only 5% of polystyrene is recycled in Russia, according to Technicol. "The waste sorting culture is not yet fully implemented in Moscow region, and a huge amount of plastic, including polystyrene foam trays, is thrown away daily. Its slow implementation is associated with a skeptical attitude towards the system of separate waste collection: there is a widespread belief among the population that all garbage will still be dumped "in one pile", - explained **Anna Dautova**, project manager of the Polymer Isolation Unit at Technicol.

At the same time, the production of secondary polystyrene is much less costly process, since it requires no more than 10% of the energy spent on the production of primary granules. Therefore, Russian manufacturers and processors should take a closer look at the best practices of such European colleagues as Ineos Styrolution, which together with Recycling Technologies develops polystyrene recycling technologies in Europe. Another good example is Versalis, which has partnered with Forever Plast to include up to 75% of secondary solid polystyrene in compounds. These materials can be used to produce thermal insulation, non-food packaging, household items and other products.

Manufacturers surveyed by the CREON Group confirmed their involvement in the circular economy in the field of polymer recycling. "Anything we have left, we put back into production", claims a major manufacturer of PS packaging. "We have essentially a closed cycle, we recycle our own and it is sufficient. If there is excess waste, we can sell it, but normally we recycle it ourselves", confirms the manufacturer of decorative and finishing materials. "We provide an opportunity to our clients to return back our materials for recycling. I think that the issue of recycling in Russia will be developed further", says a large manufacturer of thermal insulation and packaging.

“The growing involvement of the state and Russian business in recycling will undoubtedly lead to the emergence of new waste operators. This should reduce losses and provide a closed production cycle”, believes **Olga Zhuravleva**, board member of CREON Group.

Polymers in packaging 2020 conference in Moscow, on 21 October ([Program and registration](#)).