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7 March 2018

Plan proactively and find alternatives

Under current market conditions, the supply chain for polyamide 66 (PA66) is under pressure. With the surge in demand for developing lightweight vehicles and pushing the connectivity revolution forward, supply is too concentrated to reliably meet global demand.

It will take years before this structural disparity is solved. The seven Force Majeure declarations made across the US and EU in the first two months of 2018 alone do not demonstrate an incidental issue, but reveal the supply system's extreme structural fragility.[1] In the current shortage, the limiting factor for PA66 production is Adiponitrile (ADN), an input manufactured in only four large-capacity production plants – three in the US and one in France. The current total capacity and concentration of these plants is insufficient for reliable supply when the market is in equilibrium, let alone in the tight supply conditions we have witnessed over the last few years.

Severe impact

Recently announced investments in new capacity show positive signs that producers have realized that the current situation is untenable for customers downstream, however the retrofits and debottleneck measures announced by Butachimie (a production joint venture between Solvay and Invista), Invista and Ascend will not be sufficient to meet market demand until 2021, at the earliest. In the meantime, component manufacturers that rely on PA66 for their products are forced to try to meet their supply needs at elevated costs, if they are able to secure sufficient PA66 at all. We predict that PA66 demand will quickly outpace supply by *at least* 100kT or more and some PA66 consumers will be forced to consider an alternative, because PA66 will simply not be available – regardless of the price. Moreover, if demand continues at the rate of increase, it is possible that the gap could escalate to as high as 300kT, during the next couple of years.