

Raw Materials Update

Q1 2018

Macro-Economic Overview

The global and U.S. economies continue to exceed expectation for growth, even though speculation surrounds our position in the business cycle and paths for global trade. Strong job and wage growth, accompanied by increased consumer spending, interest rate hikes, and new tariffs are spurring inflation throughout consumer goods, transportation and industrial raw materials.

Adhesives & Chemicals

Acrylic Adhesives: Propylene prices started high in 2018 due to production delays at Dow and Enterprise. Prices have stabilized since January as new capacity comes on-line. Now, local growth and export demand is keeping US prices steady. Chemical Grade Propylene increased 8.5% in Q1 2018 from Q4 2017. In addition to the propylene feedstock, acrylic monomer supply demand economics have resulted in upward pressure on Acrylic Adhesive costs. Prices are expected to fall slightly through the rest of the year.

Hot Melt Adhesives: Hot melt adhesive components have seen isolated pricing pressure from the increase in Oil and Butadiene in Q1 2018 versus Q4 2017. Overall the marketplace is balanced and is forecasted to be relatively flat to 2017 on average.

Silicones: Following Siloxane supplier disruptions in Asia and Europe, the overall Silicone segment has seen considerable tightness in Q1. Pricing pressure will continue throughout 2018.



Film

Polypropylene: Polypropylene producers are limiting output to minimize inventory and push margin expansion. Plant utilization rates dropped to under 80% for the first couple months of the year. Pricing volatility will subside over the next several months, but producers will be looking to grow their margins over the next several quarters. This will result in divergent pricing from Propylene Monomer.

Polyester: Resin and film capacity disruptions continue to impact the market. Global supply constraints will persist as anti-dumping duties are imposed on US PET import from 5 countries in Q2. These 5 countries accounted for roughly 42% of all US PET imports last year. Pricing will remain elevated for at least the rest of this year.

Polyethylene; Strong oil prices and export markets have kept prices elevated. New capacity has started to come online, but not as fast as was first anticipated. Strong market dynamics are expected to continue into Q2, but inevitably new capacity hitting the market will lead to moderate deflation.

PVC: NA resin supply is tight from operational issues and increased export business. Resin pricing is projected to be up 8% by mid year over last year's average cost and supported by advanced export pricing. Plasticizers are impacted by increased feedstock pricing including propylene. TiO₂ suppliers continue to apply pricing pressure due to tight global supply and to regain margins.

Paper

Pulp prices remain high and are not expected to decrease during 2018. Global demand growth (from tissue, diaper, corrugated, etc.) is outpacing supply. China's ban on imported recycled pulp has exacerbated the economic imbalance. In addition, increasing regulation of production for some speciality chemicals used in paper topcoats has stifled production capacity and spurred hyperinflation.