

Supply Chain Update

August 2021



LyondellBasell Acetic acid leak:

First and foremost our thoughts and prayers go out to the families of the two people who were killed from the chemical leak at LyondellBasell In TX, and the six others who were Injured.

Significant strain on the supply chain continues. There was a recent explosion at a critical plant that supplies a key raw material to produce VAM, which is used in both water based and hot melt products.

There is just no margin of error in the supply chain and one disruption like the above can cause a ripple effect.

At a macro level:

The consumer has pent up demand to make purchases. Automobiles, recreational boats, and furniture for example, are all in short supply and they all use adhesive. Consumption of adhesive is up.

Spending habits have shifted. The focus is around people's homes. Prices are up over 10% in 46 of the 50 largest metros. A quick example is how hard it is to put a pool in your back yard. Families are dining in, which means more packaged goods vs fresh meats and vegetables, which means more consumption of adhesives in bottles, cartons and cases of food.

There is no inventory. Raw material trickles in, adhesive products are produced, and it goes right out the door. There's simply no buffer and that's why allocations continue.

Low interest rates and trillions of dollars in government spending are pumping cash into the economy and driving inflation.

The chemical industry has done a poor job with capital investment. The storm in TX and the repercussions highlight this fact. Our valued suppliers have invested in their plants to increase capacity but without raw material it doesn't do much good. The plants are far from running at capacity.

If you have any questions please reach out to your local BC Adhesives sales representative.

Raw Material Percentages

Feedstocks and Raw Materials: Cost Increases continue. Demand remains high and supply is improving, The percentages below are incremental cost increases that are occurring quarter after quarter.

Hot Melt	Q1 2021	Q2 2021	Q3 2021	Q4 2021
SBC	+8%	+14%	+16%	+8%
MPO	+0%	+13%	+15%	+10%
EVA	+2%	+14%	+17%	+1%
RESIN	+0%	+2%	+12%	+1%
OIL	+2%	+12%	+16%	+12%
WAX	+0%	+6%	+5%	+5%

Water-Based	Q1 2021	Q2 2021	Q3 2021	Q4 2021
VAM	+14%	+25%	+0%	+0%
ACRYLIC MONOMER	+12%	+28%	+4%	+0%
PVOH	+0%	+20%	+9%	+11%
ETHYLENE	+17%	+30%	+0%	+0%
BENZOATE	+2%	+11%	+4%	+0%

SPECIALTY	Q1 2021	Q2 2021	Q3 2021	Q4 2021
POLYETHER POLYOL	+12%	+57%	+32%	+1%
ISOCYANATE	+8%	+14%	+15%	+0%
POLYESTHER POLYOL	+0%	+10%	+10%	+0%

Cost Increases are driven by:

- Demand outpacing supply
- Logistical cost increases
- Labor shortages
- Feedstock price increases
- Scarcity of supply is causing delivery delays on packaging materials, causing disruption down the supply chain.
- In the last 10 months the cost for cold rolled steel has increased by 184%.
- Unbleached craft liner-board is up 15% year over year
- PE resin contract pricing (plastic drums, pails) are about 150% higher than May 2020 values