

PVC Increases — Fact or Fiction?

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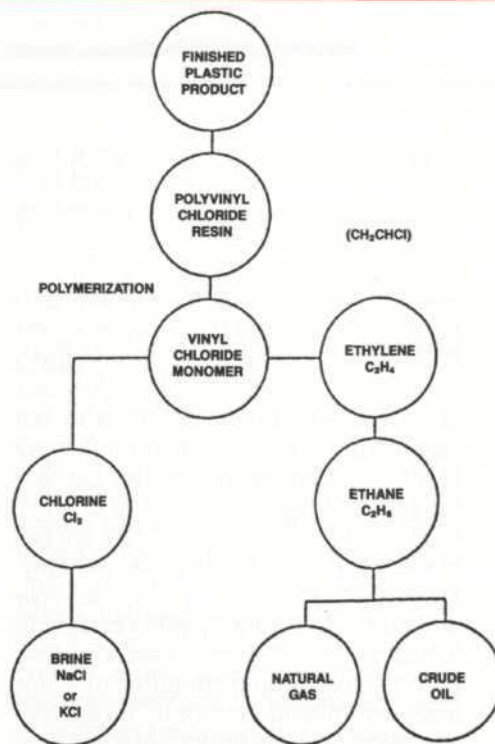
There has been much discussion about the increases we have all experienced in PVC products in the past 8 months. You have no doubt realized that none of the PVC pipe manufacturers are very eager to give you definitive answers as to what PVC prices and availability are going to be 3 months from now. As a matter of fact, I don't believe any pipe manufacturer knows what the price is going to be 30 days from now. Like everyone else, I am not going to attempt to be a fortune teller. We will attempt to give you some statistics and projections which may give you some insight into what has happened and what may happen in the future. Figures for 1987 production and shipments are not available so we will use 1986 figures.

In 1986, U.S. resin manufacturers shipped 157 million pounds more than they produced. The additional shipments came out of resin reserves. This went a long way in depleting the available resin in 1987. Resin shipments in 1986 represented 97.4% of Average Effective (resin manufacturing) Capacity.

In 1984, 15.9% more PVC resin was exported by U.S. manufacturers than was imported. In 1985, 22.8% more PVC resin was exported from the U.S. than was imported. In 1986, 40.9% more resin was exported from the U.S. than was imported. 1987 figures will show that U.S. manufacturers continued to export more resin than was imported.

At the end of 1987 there were 9 manufacturers of pipe grade PVC resin. These 9 manufacturers represented 94.7% of the U.S. resin manufacturing capability. One of the largest producers of pipe grade resin in the U.S. has indicated that they intend to quit making pipe grade resin and divert their production to "special-purpose markets where technology, quality and service provide a competitive advantage."

Since 1979, several companies have either sold their PVC resin manufacturing facilities or in some cases they have closed them down. During the same period of time, two foreign manufacturers have built plants in the U.S. The end result is an increase in Average Effective Capacity of 9% between 1979 and 1986. PVC resin ship-



PVC components

ments have increased 17.2% (nearly twice as fast) during the same period of time.

Demand for PVC resin is projected to increase 4%-5% per year over the next 5 years. PVC represents 74% of all plastics used in pipe, fittings and conduit. Because PVC already has 74% of the plastic pipe, fitting and conduit market, the increase or decrease in demand for pipe, fittings and conduit will reflect the strength of the construction market. While PVC pipe currently accounts for 40% of all plastics used in construction, it only accounts for 45% of total PVC resin usage. This percentage is shrinking steadily; panels, siding, closures, containers and film have a projected growth rate of from 50-100% greater than the demand for PVC pipe and fittings. In the future, the demand for PVC pipe will have less of an impact on the price of resin. This is the same thing that happened to ABS when a greater percentage of the resin was being diverted to the automobile industry and other specialized markets.

From 1980 through 1985 the demand for PVC resin rose an average of

6.4% per year. Current estimates are that demand for PVC resin will increase by from 4% to 5% per year for the next 5 years. Manufacturing capacity is projected to increase by 2% to 4% during the same period of time. This increase will have to come from streamlining present facilities. It takes a minimum of two years to bring a new plant on stream and no one has announced plans to build any new facilities to date. Because of new EPA requirements, it is unlikely that any of the facilities that were closed will be reopened. The money people are saying that new plants will not be started until resin increases another 20%.

One last factor: PVC pipe manufacturers are on resin allocation, regardless of what some people would have you believe. Several manufacturers have already announced a reduction in the classes or sizes of PVC pipe they plan to manufacture.

What is going to happen in the PVC market? You have the same information to formulate an opinion from as I do.

I do have one prediction. Some manufacturers of PVC pipe will withdraw from markets they have previously served.

WHAT IS PVC MADE OF?

Over the past several years this question has been asked more than once. When oil prices were dropping, how could PVC go up since it is manufactured from oil?" The fact of the matter is that oil is but one of several PVC components.

Ethylene prices have declined slightly. It takes .48 pounds of ethylene and .61 pounds of chlorine to produce 1 pound of Vinyl Chloride Monomer (VCM). Chlorine prices on the other hand increased over 14% in the last 3 months of 1987. The price of chlorine is projected to increase another 5%-10% in 1988. Ethylene prices were projected to remain the same. So far this year ethylene has increased in price.

PVC resin is then compounded. This is accomplished by adding a mixture of heat stabilizers, light (ultraviolet) stabilizers and a coloring agent plus other additives.

There you have it — PVC compound ready to be made into pipe.