Monsanto

Ken Wells - General Offices

October 31, 1967

PLASTICIZER SALES CALL REPORT
INTERCHEMICAL CORPORATION
PRESSTITE DIVISION

TO File

cc C. B. Singleton
J. K. Lilly
R. M. Parks
JFQ Research - N. W. Touchette
JFQ Research - J. R. Darby
JFQ Research - A. W. Morgan
E. C. Wilde

Date of Call: October 27, 1967

For Presstite: Mr. Wes Wells
Mr. Richard Wall

For Monsanto: Mr. C. B. Singleton
Mr. K. A. Wells

Presstite is a very large manufacturer of polysulfide sealants for the construction industry and also for the automotive industry. Recently, Chuck Cook made a call on Wes Wells who at that time mentioned they were having problems with the Aroclor 1254 volatility. This has come about because of recent Federal specifications which state that for construction sealers, there must be a weight loss of less than 15% when heated at 100°C for seven days in a forced-air oven. This is Federal Specification TT-S-00230. Therefore, our main purpose in making this call was to talk to Wes Wells and Dick Wall about Santicizer 1707 and Santicizer 278, our new modifiers for polysulfide polymers.

Both Wes and Dick agreed that they have since solved this volatility problem using a mixture of liquid and solid Aroclors. They put a small amount of solvent in the solid Aroclor which then lowers viscosity so that it can be made into a workable polysulfide system. However, they are now going into the manufacturing of polysulfide sealants for storm window construction. These are dual pane windows which are then sealed with polysulfide. Therefore, not only volatility, but also fogging, has become very important to them.

Presstite is very anxious to use an Aroclor type product which has lower volatility and very low fogging. They are presently very happy with the general-purpose polysulfide sealants they manufacture because Aroclor gives them the best overall balance of properties furnished by any modifier they have thus far looked at. Santicizer 1707 and Santicizer 278 were presented to them for investigation into the polysulfide sealant for the storm window construction. Both products were received enthusiastically. They feel they may be able to use a blend of the two to not only lower volatility, but also get the Aroclor performance properties for the physicals. Samples of Santicizers 278, 1707, and Aroclor 5442 were requested along with the technical literature on Santicizer 278.

TOWOLDMON0053421

General Information: The construction industry follows specifications set out by Thiokol for use in polysulfide polymers. They must pass a 150% elongation test and have good tensile and modulus. No specific values for physical properties other than elongation were mentioned. We also discussed the use of chlorinated paraffin-type products in polysulfide rubber. Presstite feels that chlorinated paraffins are not suitable because of the fact that the chlorine on these products is easily detached. They realize that the chlorine on Aroclor is very difficult to remove while the chlorinated paraffin products are much different.

Presstite was also impressed by the fact that Monsanto has recently divided their plasticizer product group into two areas, vinyl and non-vinyl. They feel by doing this that Monsanto can offer the non-vinyl customers much better service. They also like the idea of calling plasticizers for non-vinyl uses "modifiers." I explained to them this was because some of the products going into non-vinyl applications are not plasticizers, but strictly modifiers, and therefore we are beginning to use the term modifiers for these particular areas of application.

It was also mentioned that they grind their own curing paste and that approximately the same modifier is used in both the curing paste and the polysulfide. The only difference is that the paste grind medium may have another modifier added to it.

Presstite also mentioned that the Aroclors were excellent for polysulfide sealants because of their very low water vapor transmission. Due to the natural water impermeability of the Aroclors, the formulated sealant has much more resistance to water vapor transmission than do sealants formulated with other plasticizers.

We also talked about the polyurethane market in general. They think that the polyurethane market is one which many people talk about going into, but no one really can at the moment. They mentioned the main disadvantage with polyurethanes is their extreme water sensitivity. Since on-the-job application control is almost impossible to maintain, many times the polyurethanes are left open to the rain or humid atmosphere and will gel before they can be applied. However, they do think they have two big advantages and they are their resiliency and extreme abrasion resistance. Therefore, a natural for the polyurethane sealant will be the application into sidewalks. Polysulfides are not very suitable for this particular application because they are not abrasion resistant and will distort under heavy traffic.

Presstite brought up the application of the dibenzoate type modifiers for polysulfide sealers. Their feeling was that these plasticizers could never be utilized effectively due to their extreme water sensitivity. We should make sure in the future that all formulators of polysulfide sealants recognize the fact that products like Benzoflex 9-88 are not

TOWOLDMON0053422

suitable modifiers because of the fact that they will be water sensitive and cause pre-curing. This factor, of course, can be very sensitive if the product must be applied on the job and is exposed to moisture and will cure in the drum before it can be applied.

Ken Wells
Ken A. Wells

/bjh

0623591

TOWOLDMON0053423