

MONTHLY HIGHLIGHT REPORT - SEPTEMBER 1968

SECRET - COMPANY CONFIDENTIAL

RESEARCH & DEVELOPMENT DEPARTMENT

INDUSTRIAL PRODUCTS DIVISION

I. Industrial Products (South Bound Brook)

A. Insulation

A plant trial was made using sodium carbonate instead of sodium silicate in the inhibited Calsilite formulation. This is part of the program to develop alternate, lower cost formulations. Product obtained is now being evaluated in the chloride stress corrosion cracking test.

Preliminary work was done by dip coating Calsilite with various materials to reduce the dusting tendency of the insulation. Samples have been submitted to Sales to get their views.

B. Felts and Papers

1. Organic Flooring Felt

After previous favorable results, a repeat, longer trial run of B-10 felt was made using the Mt. Hope variable bow roll to reduce moisture expansion properties. Difficulty in obtaining consistent results was experienced. This run had no better dimensional stability than the control. During the next run an attempt will be made to identify the unknown variables.

A plant trial was made using a lower cost liquid polyacrylamide resin in place of the dry, slowly soluble version currently employed. Rolls were shipped to Whitehall for approval before conversion.

Two TCD representatives were present at Gloucester during part of the last run to observe the recent changes in SBR latex dilution procedure to avoid coagulation. There was a significant decrease in coagulation during this run and stability of the latex is now considered adequate.

2. Asbestos Flooring Felt

A repeat plant trial using TCD latex at Erie was delayed and is now scheduled for the week of October 7, 1968.

A considerable effort has been made evaluating the last 12-foot asbestos flooring run during its processing at Whitehall. The data will be studied to correlate the problems caused by the felt at Whitehall with the operating conditions and product properties found at Gloucester.

3. Gaskets

A modified formulation has been developed and a run scheduled to provide a product equal to Accopac AN-875. Based on laboratory work, the use of a sulfur cure accelerator will improve the compression recovery characteristics which were deficient in the first test run.

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4. Asbestos Paper

An alternate source of starch has been approved for use in asbestos paper at Erie. This should result in a \$5,000 annual savings.

A laboratory program was undertaken to improve the internal bond or split resistance of the special asbestos paper made for H. H. Robertson Co. The laboratory work shows a significant improvement can be obtained by saturation with quarternary ammonium silicate at a 10% level. An attempt will be made to treat their paper on the machine at Erie so that Robertson can evaluate the sheet in their molten zinc laminating operation.

C. Automotive

The flat septum dash approach at Ford is going through their Engineering and should be put out for bid in a few days. A running change could be made as early as November. If the Fairlane dash is approved, the same change can be made on the Ford and Mercury models in 1970.

Samples of the urethane foam on mastic sheet have been submitted to several customers for evaluation.

Samples of a mastic product with a high strength scrim top sheet have been developed and submitted for customer evaluation. This membrane is designed for applications where a high tear resistance is desired.

D. Special Roofing Systems

Investigation is continuing on obtaining Underwriters' fire ratings on T/NA-MS and improving the classification on T/NA 200. Results indicate passing tests cannot be obtained using Homasote as a decking with one ply of T/NA-MS. A, B or C classification using "Non-com" plywood or regular plywood with blocked joints appears feasible.