

MONTHLY HIGHLIGHT REPORT - MARCH 1970
RESEARCH & DEVELOPMENT DEPARTMENT
INDUSTRIAL PRODUCTS DIVISION

SECRET - COMPANY CONFIDENTIAL

PLAINTIFF'S
EXHIBIT
GF-1567

I. INDUSTRIAL PRODUCTS (South Bound Brook)

A. Felts and Papers

Flooring Felt

Another plant run of asbestos flooring felt was made using TCD latex 400-76E. Approximately 100 tons were produced involving two tank trucks of latex. The furnish ran successfully and the felt has been shipped to Whitehall for evaluation. During this run the white water was reused for a 24-hour period. The reuse trial was successful for this limited time. An extended run is needed to confirm the data obtained and determine what problems occur, if any, after prolonged recycling of the water.

A laboratory program is underway assisted by CRL in Easton to improve the whiteness of our flooring felt. National Floors Co. has successfully used our product but requires a whiter sheet.

Cooling Tower Fill

An R&D representative witnessed the running of two GAF test phenolic saturating papers in the Marley Co. plant in Louisville, Kentucky. One product ran successfully and is being tested further by Marley. A test roll of Carey felt processed at the same time, however, performed better and has this advantage over our product. Further work may be necessary after Marley completes their evaluation of the finished honeycomb tower fill.

B. Insulation

R&D assisted Manufacturing in an attempt to work out problems related to the use of Eagle Pitcher Celatom diatomaceous earth in the Calsilite operation. The material has a slower gel rate which results in high density finished product and overusage of raw materials. After several weeks of effort, it was decided to revert back to the original source of diatomaceous earth.

C. Automotive

Further vacuum forming trials have resulted in successfully preparing samples of a Fisher Body sail area, Ford speaker housing and Chevrolet heater housing. Samples of the various materials have been submitted for customer evaluation.

A nonstaining mastic formulation has been developed in the laboratory which meets Chrysler specifications for nonstaining properties. A plant trial run has been run at Joliet and the product is being evaluated prior to submission to the customer.

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D. Corrugated Cooling Towers

Recently some very large redwood convection-type cooling towers have been destroyed by fire. This has resulted in a favorable shift to incombustible construction materials such as corrugated and flat mineral fiber sheets. In some cases Type V cement has been specified because of a presumed superiority in sulphate resistance over the conventional Type I cement which we employ. The literature shows, however, that high pressure, steam-cured products are superior to Type V normal-cure cements. R&D is working closely with Marketing and Manufacturing to obtain some of the multimillion square foot business now under bid. Tests substituting Type V cement in our formulas are underway and other data is being accumulated to show the superiority of steam-cured products over Type V cement specified in some contracts.

II. MINERAL PRODUCTS (Hagerstown)**A. Raw Materials and New Formulations**

A serious shortage of natural and synthetic cryolite has developed. Following extensive plant tests, R&D has recommended converting to a 50/50 mixture of potassium aluminum fluoride with the existing inventory of cryolite at all coloring plants. This will extend present inventories to April, 1970. Product quality will be monitored closely during this evaluation period and if all proceeds as expected, it is anticipated that the cryolite will be completely replaced in May by the potassium aluminum fluoride. This will result in an estimated saving of \$50,000 per year.

Research personnel monitored initial plant runs of an improved 342 black formulation at Annapolis, Bound Brook and Kremlin. All runs were successful and the product showed no "silica bloom" similar to that experienced on Annapolis production. Two other new colors were successfully introduced during the month.

Plant production of an improved pastel red formula gave the projected dollar per ton savings and superior quality. Extended 500-ton trials at Charmian of 702 white employing Hi-Sil 404 produced granules of acceptable quality at about \$.50 per ton saving. Runs of significant duration are scheduled at the other three coloring plants. The modified formula would save approximately \$60,000 per year on pigment costs for white granules.

B. New Products**Inorganic Foam**

Progress is being made in the development of an inorganic foam based on sodium silicate. A formulation that yields in the laboratory an improved water repellent, fine cell insulation at a density of 13 pounds per cubic foot is now available. Methods of preparing larger samples for physical and other tests are now being pursued.