



SHELL CHEMICAL CORPORATION

RCA BUILDING
50 WEST 50TH STREET
NEW YORK 20

May 6, 1952

SHELL DEVELOPMENT COMPANY
4560 Horton Street
Emeryville 8, California

Attention: Dr. K. R. Edlund

Gentlemen:

DYES TO FACILITATE COMPLETE MIXING OF CURING AGENTS AND EPON RESINS

This will refer to your report of March 7, 1952 under PAL 500-E-78, in which you indicated that the addition of 0.5% titanox to the base Adhesive VI and Resoform Red BP to the curing agent gave a color background which facilitated the complete mixing of EPON Adhesive VI.

We suspect that a number of difficulties reported for Adhesive VI in the past have been due to improper mixing and we, therefore, request that the above additions be made in your formulating of Adhesive VI for sale.

We understand that 0.2% of Resoform Red BP added to the curing agent provides a suitable color contrast. We assume in making this request that the small amount of both additives will not result in deleterious effects on the various properties of the adhesive and the above report mentions that tensile shear strength of aluminum bonds was unaffected by such addition tested at -70°F, room temperature, and 180°F.

We are having the Adhesive VI label revised here to add the extra instruction that the customer mix the components until the red color is uniformly distributed.

Your wire of January 25, 1952 states that Calco Gas Green O 9660 Special and Calco Oil Black 8603 give satisfactory color contrast when added to Curing Agent B for use with EPON 828 in casting and potting. We understand that a third dye, a Calco Oil Blue, has since been found to perform similarly.

We are likewise very much interested in adding a dye to Curing Agent D to facilitate mixing. We understand that the Green, Black, and Blue dyes mentioned above give a satisfactory color contrast and no deleterious effects on curing or on electrical properties. If this understanding is correct, we would also appreciate your adding the most suitable of these colors to all future shipments of Curing Agent D, providing there is no significant effect on casting transparency.

770.21

SHELL DEVELOPMENT CO.			
REC'D MAY 9 1952			
44-111	248		
44-111	B	FF	
McM	Sauyer	KP	
P...			
TO HANDLE: TFB-mcm			
MSD 6/12/52 BY [signature]			

Handwritten notes:
Jea
Cliff
Will you
arrange
extending
titanox
& Resoform
Red BP.

PLAINTIFF'S EXHIBIT

SH-1014

LAM 028962

ABS-018168

May 6, 1952

We would appreciate any comments you may have on these requests and your advice as to when such addition will be initiated in Curing Agents A and B, and in Adhesive VI resin in order that we may so advise the marketing divisions and districts.

Very truly yours,



F. S. Swackhamer, Manager
Resins and Plastics Department

cc: Mr. D. C. Wells
Mr. S. T. Raycraft

LAM 028963

ABS-018169