Monsanto

FROM (NAME & LOCATION) C. D. Bias

DATE : February 27, 1968

SUBJECT : Atwood Adhesives

REFERENCE : WR 68-18

TO : K. A. Wells - B-3-N

cc: A. W. M. Coaker - Res 3
J. R. Darby - Res 2
W. F. Waychoff - WWAYC
W. K. Johnson - WJOHN
N. W. Touchette - Res 3
J. A. Cannon - Res 3
C. Paton - CPATO
E. C. Wilde - EWILD
adhesives

We prepared the following adhesives for water immersion testing, per Fed. Test Method Std. No. 101a, Method 116:

	A	B	C	D
Gelva TS-65	90	90	90	90
Santicizer 885	10	9	9	9
Santicizer 8		1		
Aroclor 1254			1	
Aroclor 5460				1

Two types of paper were received for testing. One type, sent to us by Crown Zellerbach, was V3c, a corrugated fiberboard. The other type, sent by the paper group, was labeled "Solid Sulfite Board." This paper should have been Type V1s or V2s. When we tried to test the strength of the adhesive bond on the Instron after water immersion, all samples of the latter type showed failure of the paper itself, so that we could not measure the sheer strength of the adhesive bond. The corrugated paper samples behaved normally, with the following results:

	Sheer Strength, PSI
A	0.96
B	1.02
C	1.23
D	1.11

These results are averages of ten samples each. Sample C, containing Aroclor 1254, was definitely better than the other three. I am somewhat surprised that "B" was only slightly better than "A". I would have thought there would be a greater difference between the two.

If you want these formulations retested, we will have to have more V3c or V3s from Crown Zellerbach, preferably about a pound, or at least a dozen sheets one foot square. We would also need a like amount of V1s or V2s solid fiberboard.

Time: 16 hours

C. D. Bias

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