Monsanto

FROM (NAME & LOCATION) A. W. Morgan - St. Louis Organic Research

DATE : June 22, 1970

SUBJECT : TACKIFIERS FOR ADHESIVES

REFERENCE :

cc: M. W. Farrar Res.
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N. W. Touchette Res.
R. H. Mills Res.
C. S. Shull Res.

TO : P. R. Graham
PGRAH

Under separate cover you have been sent four experimental tackifier additives for solvent based adhesives. Adhesion promotion is also shown in several instances. The samples and code numbers are as follows:

XS-252	(60:40 Aroclor 5460/Santicizer 711)
XS-253	(50:50 Aroclor 5460/Santicizer 148)
XS-254	(50:50 Aroclor 5460/Santicizer 160
XS-255	(50:50 Aroclor 5460/β-phenoxyethyl benzyl phthalate)

Test formulations were generally as follows (Kraton 101-(Shell) and Ameripol 1006 were used as SBR's).

SBR	100
Toluene	200
ZnO	4
Sulfur, Accelerators	5
Antioxidants	1-3
Tackifier	75

Ten mil (wet) coatings were applied to stainless steel "T-bars" (3 in.^{2} area), dried, the bars were clamped together and then cured 25 min. at 148°C. Ninety degree bond strengths were measured on the Instron.

	Strength (PSI)	
Sample	Kraton 101	Ameripol 1006
XS-252	--	57
XS-253	50	26
XS-254	--	62
XS-255	115	80
(1:1 Aroclor 5460/S-8)	--	22

The highest "tack" is found with XS-253 while XS-255 gives the firmest adhesive. As is seen, a range of

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properties has been achieved. Aroclor 5460 alone as well as controls were not tacky.

These materials are intended basically to get a feel for the requirements of the market. There is still, of course, considerable work to be done.

Please call if there is other information which you need.

A W Morgan

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