

Monsanto

*PVAc
adhesive*

FROM
(NAME-LOCATION-PHONE) P. W. May - Galt Labs - 1730

DATE : April 9, 1981
SUBJECT : STEROX NM REPLACEMENT
REFERENCE : Memo JHO/DHP, 1-9-81
TO : J. H. Orem
B3NC

cc. M. W. Farrar - T3B
N. W. Touchette ✓
D. H. Paul

Santicizer 598 and Santicizer 160/surfactant blends, along with controls, were tested in Gelva S-55XH at 10% for viscosity build and stability. This testing was done in duplicate, on separate days, and the numbers in the attached table are an average of these tests.

Based on these results, Surfonic N-120 appears to be an acceptable substitute for Sterox NM in Santicizer 598 (XA-1013). Tergitol NP-13 also looks very good. The Surfonic N-120 gave the most stable viscosity over the 4 week period, however.

PWM/gls
attach.


P. W. May

DSW 587068

STLCOPCB4092403

EFFECT OF PLASTICIZER/SURFACTANT BLEND ON
PVAc EMULSION VISCOSITY OVER TIME

BROOKFIELD VISCOSITY (CPS) AT:

<u>PLASTICIZER</u>	<u>Initial</u>	<u>1 Day</u>	<u>7 Days</u>	<u>14 Days</u>	<u>21 Days</u>	<u>28 Days</u>
Santicizer® 160	7350	7450	6800	6900	7400	7600
Santicizer 598 (XA-1013)	9050	9150	8600	9050	9750	9750
<u>Santicizer 160 + 4%:</u>						
Sterox NK	8200	8400	7850	8050	9000	9700
Tergitol NP-13	8700	9100	8800	8900	9800	10300
Triton N-111	8100	8300	7700	8250	8800	8750
Surfonic N-120	9050	9000	8100	8550	9100	9050
<u>Benzoflex 50</u>	7800	7600	7350	7700	8050	8400
<u>Benzoflex 9-88</u>	7750	7500	7250	8000	8600	8600
<u>DBP</u>	7750	7450	7000	8100	8200	8250

COMMENTS:

- Either 4% Surfonic N-120 or 4% Tergitol NP-13 in Santicizer 160 mimics the viscosity/time behavior of XA-1013.
- Surfonic N-120 appears to give the most stable viscosity over time.
- Lower viscosities at 7 days and 14 days are probably due to ambient temperature variations.
- Unplasticized Gelva S-55XH had a viscosity of 4700 cps.

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