

Volume 100
Monsanto

FROM (NAME & LOCATION)

John H. Orem - General Offices - B3ND

DATE March 20, 1975

SUBJECT CUSTOMER VISIT

REFERENCE

TO : FILE

cc. R. N. Brell
R. W. Bucknell
A. W. M. Coaker
~~John R. Garry - 1130~~
O. DeGarmo
B. R. Dolimount - 1130
M. W. Farrar - R2E
E. H. Fording
J. H. Gannon
P. R. Graham
R. V. Johnson - 1130
A. W. Morgan - 1730
R. W. Radue - Q2C
J. M. Van Gelder
N. W. Touchette - 1730

CALL ON: Nashua Corporation
Nashua, New Hampshire

DATE: March 14, 1975

MONSANTO PERSONNEL: John H. Orem
Bruce R. Dolimount

NASHUA PERSONNEL: Mr. Paul O'Leary, Chemist

DCHP

The Oregon report condemning the plasticizer volatiles in hot melt adhesives deeply concerns Nashua. DCHP is the first to come off; it has the lowest melting point. It is because of the sharpness, and the fact its M.P. is comparatively low, that DCHP is used. Of interest, DCHP is a major component in these hot melts; "thermo-sensitives" is the new terminology.

General composition of these adhesives includes:

- plasticizer (DCHP)
- tackifying resin (hydrocarbon resins or rosin esters, etc.; these are thermoplastic)
- dispersant
- binder (an elastomeric; purpose is to hold the material on the web as it is coated)
- modifying resin (used to achieve specific adhesion -- use level is low)

These hot melts are water based.

DSW 586783

STLCOPCB4092117

Printed labels coated with hot melt adhesive is applied to the package and activated with heat from the top (through the label face). The electric hot plate that is used for activation can reach and exceed 400°F. In an automated line, the label's contact time with the heat source is less than one second, ca 0.6 seconds. On non-automated lines, there is no control and contact time can be 2-3 seconds.

Paul O'Leary inquired whether we knew the nature of DCHP fumes; what comes off as DCHP melts? I will look into this matter.

Diphenyl Phthalate

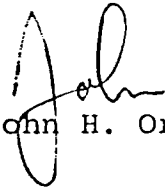
Its function in hot melts is to control open time. With its higher melting point, it lengthens the time before the adhesive sets up.

Santicizer 160

The program to swing from SBR to PVAc emulsion adhesives has been delayed. Cost was the incentive for the switch. With SBR emulsions dropping in price, again they are very competitive, they are less expensive than PVAc emulsions.

Santicizer 141

This was not discussed.


John H. Orem

JHO/rlg