Monsanto

FROM (NAME & LOCATION): P. W. May, St. Louis Research Dept.

DATE: January 15, 1968

SUBJECT: DCHP - Brown Bridge

REFERENCE: WR 67-160

TO: Ken Wells - KWELL

CC:
M. W. Farrar - Res 1
J. R. Darby - Res 2
R. M. Parks - RPARK
W. F. Waychoff - WWAYC
C. Paton - CPATO
E. C. Wilde - EWILD
J. A. Cannon - Res 3
A. W. M. Coaker - Res 3
R. H. Mills - Res 3
N. W. Touchette - Res 3

Adhesives.

The complaint from this company was a darkening of an adhesive made using our dicyclohexyl phthalate. Volatility and heat stability tests were run at several time and temperature combinations on several samples of DCHP in an attempt to answer this complaint. Two of the samples tested were from Monsanto:

1. Lot #710 returned by Brown Bridge
2. Current production DCHP

The third sample tested was Hatco's DCHP.

Results:

	% Weight Loss			
	105°C.		175°C.	
	2 hrs	18 hrs	4 hrs	Color
1	.13	.84	1.2	Yellow clear
2	.18	.84	1.0	Lt. yellow cloudy
3.	.11	.71	1.0	Lt. yellow clear

Since our product seemed to have slightly poorer heat stability than Hatco's, the DCHP samples were recrystallized from methanol and another volatility test run at 175°C. for four hours. Although the weight loss was much higher here than with the DCHP as received, because the crystals were not quite dry at the start, the Hatco product was still the lowest in % weight loss and had the best color.

Results on recrystallized DCHP

175°C. for 4 hours

	% Weight Loss	Color
1	3.6	Lt. Yellow
2	3.8	Lt. Yellow
3	3.4	White

DSW 586957

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This work only seems to substantiate Brown Bridge's contention that the material they returned had poor heat stability. In view of the fact that except for streaking during application which you say is a production problem, this company now finds our current production DCHP acceptable, we will not test further.

Time: 16 hours

P. W. May

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