

Cross Reference:

Dow Chemical Co.
Dowicide
House Paint
Mildew inhibitor

"INDEXED"

Je 25 '58

CC: Mr. J. W. Iliff, Lab.
Mr. H. F. Ether, Lab.
Mr. Stuart Graves, Lab.

Philadelphia Laboratory
July 30, 1946

RETURN TO MARSHALL LABORATORY LIBRARY

MEMORANDUM REPORT M-68

DOW CONCENTRATE MILDEW INHIBITOR FOR HOUSE PAINT

REFERENCE COPY

NOT FOR CIRCULATION

Dow Concentrate is a solution of Dowicide #6 in a ketone solvent. It is suggested as an alternative method of handling Dowicide in order to avoid the hazard of a toxic dust. The present report covers the incorporation of this material into Outside White house paint for determination of stability and initial property. The effectiveness in preventing mildew and the possible effect on durability are being determined in exposure series 9188.

Dow Concentrate has been incorporated in a white house paint corresponding to the expected postwar composition with 35% pigment volume and the vehicle 75/25 raw oil/VO-114 "S" bodied linseed oil. Rapid bodying to a puffy paste occurs when 10% of the concentrate (5% Dowicide #6) is used on the total weight of the paint. The consistency and stability are satisfactory at concentrations of 6% or 2% of the concentrate (3% and 1% of Dowicide #6). Since the desired concentration of Dowicide #6 is about 3%, it appears that Dow Concentrate could be used in the manufacture of paint.

There is no important effect on the initial properties of the paint.

The question whether it would be desirable to use Dow Concentrate involves the desirability of using other solvents than ketones for house paint. Apparently, a solution in mineral spirits is not stable at high concentrations. However, Dowicide #6 is soluble in linseed oil, and it might be possible to obtain a solution in linseed oil rather than in a volatile solvent. This might be discussed with the Dow Company in case it becomes desirable to incorporate Dowicide in house paint.

Notebook Reference: 3081, pages 72-83.

PHILADELPHIA LABORATORY

William F. Singleton
WILLIAM F. SINGLETON

WFS:MEH