

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 28 1987

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg No. 239-1246. Additional product chemistry data for Chevron captan technical in response to registration standard. (MRID# 402318-01) [RCB# 2427]

FROM: Richard Loranger, Chemist *R. Loranger*  
Residue Chemistry Branch  
Hazard Evaluation Division (TS-769)

THRU: Andrew Rathman Section Head *ARR*  
Residue Chemistry Branch  
Hazard Evaluation Division (TS-769)

TO: Richard Mountfort/Eugene Wilson, PM 23  
Registration Division (TS-767)

As requested in the 4/2/87 J. Garbus review, Chevron Chemical Company has provided data on melting point, density, solubility, pH and stability for their captan technical. These data were required by the Captan Registration Standard (March 1986) and are listed below.

- 63-5 Melting Point (TGAI) 160-170°C
- 63-7 Bulk Density (TGAI) 0.70-0.95 g/cc packed  
0.30-0.50 g/cc fluff
- 63-8 Solubility (PAI) Water <1 ppm at 23°C  
For organic solvents the solubilities were as follows  
in g/100 mL at 20°C: acetone-3.0, acetonitrile-3.6  
(22°C), ethyl acetate-4.7 chloroform-7.8 methylene  
chloride-3.0, ethanol-0.29, xylene-0.6, toluene-0.7.
- 63-12 pH (TGAI) 8.8-9.5 for 5% dispersion in water
- 63-13 Stability (TGAI) Three samples were held at 50°C for 30 days. For two there was essentially no change (<0.1%) in the active ingredient level (<0.1%). The third experienced a drop from 91.34 to 90.45%.

The melting point and solubilities in acetone, xylene, chloroform, and ethanol agree with those submitted by other members of the Captan Task Force. The differences in pH values (eg., 4.85 for Stauffer technical) is probably due to the low solubility of the captan resulting in impurities controlling this property.

As noted in our concurrent review of Makhteshim's data, we do not object to the solubilities being measured on the pure active ingredient. Although the Registration Standard calls for use of the technical, 40 CFR 158.120 states that either the pure or technical grade of the active may be used.

CONCLUSION

The above satisfies the remaining product chemistry requirements for the Chevron captan technical.

cc Circu, RF, Captan SF, Reviewer, PMSD/ISB  
RDI:Section Head:ARRathman:8/27/87:RDSchmitt:8/27/87  
TS-769:RCB:557-7324:RAL:ral(12):CM#2:RM.810 Date 8/28/87

2