

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

October 2, 1992

TO: File for thiram (CAS No. 137-26-8)

FROM: Mary Lee Hultin, Toxics Unit

SUBJECT: ITSL for thiram

The U.S. EPA IRIS database lists a reference dose (RfD) for thiram (CAS No. 137-26-8). The RfD of 5E-3 mg/kg-day represents a No Adverse Effect Level (NOAEL) of 100 ppm from a 2 year rat feeding study. Rats receiving 300, 1000, or 2000 ppm of thiram in their diets exhibited the following signs of neurotoxicity: weakness, ataxia, varying degrees of hind limb paralysis and calcified masses in the basal ganglia in the cerebellum. The no effect dose of 100 ppm was converted by EPA to 5 mg/kg-day. The ACGIH also has a TLV of 1 mg/m³ for thiram. In accordance with Rule 232, the Rfd is used preferentially since there is no evidence to suggest that its use is inappropriate.

$$\text{ITSL} = \text{Oral RfD} \times (70 \text{ kg}/20 \text{ m}^3)$$

$$\begin{aligned} \text{ITSL} &= 5\text{E-}3 \text{ mg/kg-day} \times (70 \text{ kg}/20 \text{ m}^3) = 1.75\text{E-}2 \text{ mg/m}^3 \\ &\text{or } 17.5 \text{ ug/m}^3 \\ &\text{based on 24 hr. averaging} \end{aligned}$$