

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

June 17, 1992

TO: FILE

FROM: Betty Locey, Toxics Unit

SUBJECT: ITSL for FC-247 (136797-56-3)

FC-247 is a 3M product used in Scotchguard. Three M will not release the Cas No. for a trade secret component of this mixture. The Product Environmental Data Sheet list the following as the contents of FC-247: water (59%), fluoroalkyl polymer mixture (30%), ethylene glycol (8%), sorbitan, mono-9-octadecenoate, poly(oxy-1,2-ethanediyl) derive...(2)-, and ethyl acetate. Marge Fitch of the Surface Water Division conducted a CAS online search; she was not able to find any toxicity data.

Three M has provided us with a summary of LD50 toxicity testing they conducted on FC-247. The ITSL was based on this LD50.

$$ITSL = \frac{1}{500} \times \frac{1}{40} \times \frac{1}{100} \times \frac{LD50mg/kg \times Wa}{0.167 \times Ia}$$

LD50 > 5 g/kg Albino rats

$$ITSL = \frac{1}{500} \times \frac{1}{40} \times \frac{1}{100} \times \frac{5000mg/kg \times 0.275kg}{(0.275)(0.629 kg) * **0.167}$$

ITSL = 0.0238 mg/m³ - annual average.
ITSL = 24 µg/m³ - annual average

*Lacking specific data on the rats in this study I used ♀ - (study 1/2 female, 1/2 male) most conservative set from our generic set.

BJL:ma