

Michigan Department of Natural Resources

Interoffice Communication

November 17, 1992

To : Panasol AN-2K File (CAS # 68477-31-6)

From : Gary Butterfield

Subject : ITSL for Panasol AN-2K

Panasol AN-2K is produced by AMOCO Corp., Chicago IL but is also known by a more generic name as low boiling distillate residue, or aromatic petroleum derivative solvent. The only toxicity data found for this chemical was from AMOCO's MSDS. The toxicity data cited wasn't published, but AMOCO's toxicologist, Dave Dutton, was willing to provide a copy of the LD50 study. The MSDS also described a 90 day study with a similar but different material, Panasol AN-3K. The MSDS seemed to be utilizing the similar substance's data to support the low toxicity of Panasol AN-2K. The LD50 study was of adequate quality to support the calculation of an ITSL. This ITSL is based on the LD50 for this material as the LD50 was determined with the actual material being used in a permit. Rather than trying to utilize the unobtained, unpublished 90 day study data from the similar substance, Panasol AN-3K.

Thus the ITSL can be calculated as follows from the unpublished female Sprague-Dawley rat LD50 of 3797 mg/kg.

$$\text{ITSL} = (3797 \text{ mg/kg}) / (500 \times 40 \times 100 \times 0.167 \times 0.9) = 13 \text{ ug/m}^3 \text{ annual average}$$
where 0.9 m³/kg is the default rat inhalation rate from EPA 1988.

References

EPA. 1988. Recommendations for and documentation of biological values used in risk assessment. PB 88-179874.

IIT Research Inst. 1979. Acute oral toxicity study of panasol AN-2K in rats. IITRI Project No. L8100. Obtained from Dave Dutton, phone (312) 856-4251.