

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

August 13, 2001

TO: File for Dodecamethylpentasiloxane (CASRN 141-63-9)
FROM: Mary Lee Hultin, Toxics Unit, Air Quality Division
SUBJECT: Initial Threshold Screening Level Data Search

The initial threshold screening level (ITSL) for dodecamethylpentasiloxane (CASRN 141-63-9) remains at $0.1 \mu\text{g}/\text{m}^3$ based on an annual averaging time.

The following references or databases were searched to identify data to determine the ITSL: IRIS, RTECS, CESARS, EPB-CCD, MDEQ library, CAS-online, NLM-online, NIOSH Pocket Guide, and ACGIH Guide.

A review of the above databases provided no adequate information to derive an ITSL for dodecamethylpentasiloxane. However, should a permit be requested for this chemical, a "surrogate" LD_{50} may be calculated from data reported by Rowe *et al.* (1948). (This is not a preferred method for ITSL derivations but does provide a value greater than trace.) Therefore, the ITSL remains at trace.

The ITSL for dodecamethylpentasiloxane (CASRN 141-63-9) = $0.1 \mu\text{g}/\text{m}^3$ based an annual averaging.

Reference:

Rowe, V. K., H. C. Spencer, and S. L. Bass. 1948. Toxicological studies on certain commercial silicones and hydrolyzable silane intermediates. *J. Ind. Hyg. Toxicol.* 30:332-352.

MLH:CB:DB

cc: Cathy Simon, AQD
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