

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

To: File for Cyclohexenylacetonitrile (CAS # 6975-71-9)

From : Keisha Williams, Air Quality Division, Toxics Unit

Subject : Screening Level File Updates for Cyclohexenylacetonitrile

Date: December 22, 2016

The initial threshold screening level (ITSL) for cyclohexenylacetonitrile is $3.5 \mu\text{g}/\text{m}^3$, annual averaging time and was established on January 13, 1994 (MDNR, 1994).

This memo to file is meant to identify references presented in the original file. The ITSL was based on AQD Rule 336.1232 (1) (h) and 336.1232 (2) (c). The reference for the research study used for the ITSL derivation is provided here.

References

Act 451 of 1994, Natural Resources and Environmental Protection Act and Air Pollution Control Rules, Michigan Department of Environmental Quality.

Komejan, R.G. 1985. Final Report Summary: Acute Oral LD50 in Rats. Unpublished Report. Consumer Product Testing Inc.

MDNR. 1994. Memo from George Eurich to File for Cyclohexenylacetonitrile (CAS # 6975-71-9). Subject: Screening Level for Cyclohexenylacetonitrile. January 13, 1994. Michigan Department of Natural Resources, Air Quality Division.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

January 13, 1994

TO: File for Cyclohexenylacetonitrile (CAS # 6975-71-9)

FROM: George Eurich

SUBJECT: Screening Level for Cyclohexenylacetonitrile

The ITSL for cyclohexenylacetonitrile has been set at $3.5 \mu\text{g}/\text{m}^3$ based on annual averaging time.

The ITSL is based on a surrogate 1.050 from a summary range finding study done by Consumer Product Testing. Albino rats (5/sex/dose) were orally dosed with test material and observed for pharmacologic activity and drug toxicity at 1, 3, 6, and 24 hours post—treatment, and daily thereafter for a total of 14 days. The calculated LD50 was established as 1.08 g/kg.

$$ITSL = \frac{1}{500 \times 100 \times 40} \times \frac{1080 \frac{mg}{kg}}{.167 \times .931} = 3.5 \frac{\mu g}{m^3} \text{ (annual average)}$$

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MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

August 31, 1993

TO: File for cyclohexenylacetonitrile (CAS# 6975-71-9)

FROM: Linda Larsen, Toxics Unit

SUBJECT: Screening level for cyclohexenylacetonitrile (CAS# 6975-71-9)

The interim initial threshold screening level (ITSL) for cyclohexenylacetonitrile is .04 $\mu\text{g}/\text{m}^3$ based on annual averaging.

The following databases were searched for toxicity data:

RTECS
EPA IRIS
DNR EPB and NUTSHELL
NIOSH
ACGIH TLV
CAS Online
HEAST
IARC Monographs
NLM

A search of the sources above failed to identify an RfD, RfC, TLV or REL for cyclohexenylacetonitrile. The available data is insufficient for derivation of an initial screening level based on the toxicity, carcinogenicity, teratogenicity or mutagenicity of this compound. The ITSL is therefore set at trace (ITSL=.04 $\mu\text{g}/\text{m}^3$).