

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: File for Ethyl-8-bromooctanoate (CAS # 29823-21-0)

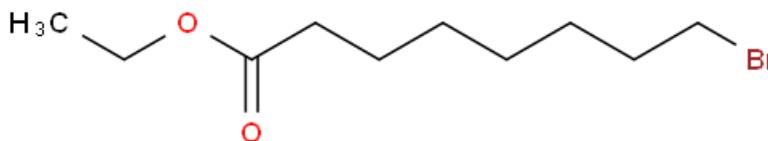
FROM: Doreen Lehner, Air Quality Division, Toxics Unit

SUBJECT: Screening Level Derivation for Ethyl-8-bromooctanoate (CAS # 29823-21-0)

DATE: February 23, 2017

The initial threshold screening level (ITSL) for ethyl-8-bromooctanoate is 0.1  $\mu\text{g}/\text{m}^3$  based on an annual averaging time.

Ethyl-8-bromooctanoate (CAS # 29823-21-0) is also known as caprylic acid,  $\eta$ -bromo-, ethyl ester (4Cl); 8-bromocaprylic acid ethyl ester; and 8-bromooctanoic acid ethyl ester. It is a clear to yellow liquid with a molecular weight of 251.16 g/mol.



**Figure 1.** Structure of ethyl-8-bromooctanoate.

A literature review was conducted to determine an ITSL for ethyl-8-bromooctanoate. The following references and databases were searched to derive the above screening level: Chemical Criteria Database (CCD), United States Environmental Protection Agency (USEPA) Integrated Risk Information System (IRIS), National Institute for Occupational Safety and Health (NIOSH), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values and Biological Exposure Indices (TLV/BEI) 2014 Guide, National Toxicology Program (NTP) Study Database, International Agency for Research on Cancer (IARC), Acute Database, Chemical Abstract Service Online (SciFinder) [searched on 2/17/2017], National Library of Medicine (NLM) Online, EPA Aggregated Computational Toxicology Resource (ACToR) Database, EPA Toxic Substance Control Act Test Submission Database (TSCATS), EPA Chemview Database, and the European Chemicals Agency (ECHA).

The USEPA has not established a reference concentration or reference dose for ethyl-8-bromooctanoate. No toxicological data on ethyl-8-bromooctanoate was found after an extensive literature search was completed. There are no toxicity studies available from which a screening level could be established.

Pursuant to Rule 232(1)(i), the ITSL for ethyl-8-bromooctanoate is  $0.1 \text{ ug/m}^3$  based on an annual averaging time.

**Reference:**

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

DL:lh