

## Michigan Department of Environmental Quality

### Interoffice Communication

TO: File for Nitric acid, ammonium calcium salt (CAS # 15245-12-2)

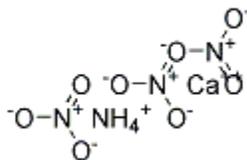
FROM: Doreen Lehner, Toxics Unit, Air Quality Division

SUBJECT: Screening Level for Nitric acid, ammonium calcium salt (CAS # 15245-12-2)

DATE: November 7, 2011

The initial threshold screening level (ITSL) for calcium ammonium nitrate (CAS # 15245-12-2) is 0.1 µg/m<sup>3</sup> annual averaging time.

Nitric acid, ammonium calcium salt (CAS # 15245-12-2) is also known as calcium ammonium nitrate or CAN, is an odourless white granule with a formula weight of 244.13. It is primarily used as a general plant nitrogenous fertilizer.



Calcium ammonium nitrate

A literature review was conducted to determine an initial threshold screening level (ITSL) for calcium ammonium nitrate. The following references and databases were searched to derive the above screening level: EPBCCD, United States Environmental Protection Agency (US EPA) 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) 2010 guide, National Toxicology Program (NTP) Study Database, International Agency for Research on Cancer (IARC), Acute Database, Chemical Abstract Service (CAS) Online (searched 10/17/11), National Library of Medicine (NLM)-online, EPA Aggregated Computational Toxicology Resource (ACToR) Database, US EPA TSCATS database, and Hazardous Substances Data Bank (HSDB).

RfC or RfD values were unavailable. There is no NIOSH recommended exposure limit data available for this compound or a threshold limit value from ACGIH. No 7-day inhalation studies which would yield a LOAEL or NOAEL and no acute inhalation data where an LC<sub>50</sub> can be derived. Based on Rule 232(1)(i)

the ITSL is set at the default of 0.1  $\mu\text{g}/\text{m}^3$ . According to Rule 232(2)(c), the averaging time is annual.

The initial threshold screening level (ITSL) for calcium ammonium nitrate (CAS # 15245-12-2) is 0.1  $\mu\text{g}/\text{m}^3$  annual averaging time.

**References:**

APCR. 2011. Air Pollution Control Rules, Promulgated pursuant to Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, Michigan Department of Environmental Quality. 1994. Act 451, as amended (NREPA).