

Material Safety Data Sheet

Version: 1.3

Revision Date : 10/16/2009
Date Issued : 10/17/2009

INDULIN AA-57 D

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade name : INDULIN AA-57 D
 PRODUCT CODE : 209656
 CHEMICAL FAMILY : Quaternary Ammonium Compounds

Information on manufacturer/supplier : Evonik Goldschmidt Corporation
 914 EAST RANDOLPH ROAD
 HOPEWELL, VA 23860

Emergency telephone number (24h) : Telephone:
 CHEMTREC (800) 424-9300
 CANUTEC (613) 996-6666
 Non-Emergency Phone Number: (800) 732-5616

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration [%]
Quaternary Ammonium cpds., N,N,N,N'-Pentamethyl-N'-Tallow Alkyl Trimethylenedi-, Chlorides	68607-29-4	35 - 55
Ethanol	64-17-5	30 - 40
Methyl Chloride	74-87-3	< 0.03

3. HAZARDS IDENTIFICATION

Emergency Overview

Physical Appearance

Form : Liquid
 Colour : Pale Yellow
 Odour : Alcohol
 Water solubility : Dispersible

 pH : 7 - 9
 At 10%, in water.

Potential health effects

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- Immediate concerns : WARNING: Corrosive. Causes skin and eye burns which may result in permanent damage. Flammable. Keep away from heat, sparks and open flames. Avoid contact with skin, eyes and clothing. Wear safety goggles, neoprene gloves and impervious clothing when handling this product. Wash thoroughly after handling.
- Eyes : Liquid causes severe irritation and may cause permanent damage. Concentrations >1000 ppm of ethanol vapors can also cause irritation.
- Skin : Can cause severe irritation, even burns, on prolonged contact. Repeated contact can cause defatting, cracking and dermatitis.
- Ingestion : Results in severe damage to mucous membranes.
- Inhalation : High concentrations (>1000 ppm) of ethanol vapor can cause irritation of the respiratory tract, headache, and, if continued, drowsiness, unconsciousness, etc.
- Primary routes of entry : Eyes, Skin, Inhalation, Ingestion
- Target organs : Eyes, Skin, Respiratory Tract, Digestive System
- Carcinogenicity : Not listed by NTP, IARC, ACGIH, or OSHA as a carcinogen.

4. FIRST AID MEASURES

- Eyes : Immediately flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get medical attention immediately. If physician is not immediately available, continue flushing with water. Do not use chemical antidote.
- Skin : Immediately wash exposed area with soap and water for at least 15 minutes, then flush with water for at least 5 minutes. If reddening persists, or if open sores or blisters develop, see a physician. Remove contaminated clothing and launder before re-use.
- Ingestion : Immediately drink two large glasses of water. Call a physician.
- Inhalation : Remove individual from site of exposure to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

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5. FIRE-FIGHTING MEASURES

- Flash point : approx. 50 °F
Method: Penskey-Marten CC
- Ignition temperature : Not Established
- Suitable extinguishing media : Dry chemical, water fog, alcohol foam
- Products in case of fire : Carbon monoxide, nitrogen oxides, organic amines, hydrogen chloride, methyl chloride, and various unknown organic compounds.
- Further information : Water or foam may cause frothing which can be violent, especially if sprayed into containers of hot, burning liquid.
- Special protective equipment for fire-fighters : As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.
- OSHA flammable class : Flammable Liquid, Class IB

6. ACCIDENTAL RELEASE MEASURES

- Methods for cleaning up / taking up : Small spills :
Extinguish all nearby sources of ignition. Control spill with adsorbant pads or booms. If necessary, apply granular or loose sorbent to spill. When adsorbed, sweep or otherwise collect and dispose of properly.
Large spills :
Eliminate all sources of ignition, and extinguish nearby heat sources and open flames. Stop spill at source, dike area of spill to prevent from spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

Release Notes :

US regulations require reporting spills of this material that could reach any surface waters

In case of accident or road spill notify :

Telephone:

CHEMTREC USA

(800) 424-9300

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CANUTEC Canada (613) 996-6666
CHEMTREC (other countries) (International code)+1-202-483-7616

7. HANDLING AND STORAGE

General Procedures Handling

Advice on protection against fire and explosion : Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors or other ignition sources at locations distant from material handling point. Never use cutting or welding torch on or near drum (even empty); product (or even residue) can ignite explosively. All five gallon pails and larger metal containers should be grounded. Care should be taken to avoid static discharge when transferring liquid to and from nonconductive containers.

Storage

Requirements for storage areas and containers : Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches, unless adequate grounding is first established. Keep away from heat, sparks, and open flames. Based on the product flash point and vapor pressure, suitable storage should be provided in accordance with OSHA, 29 CFR 1910.106. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture, or weld on or near container. All label warnings must be observed until the container has been cleaned or reconditioned.

Further information : Exercise caution when handling contents of the container. Wash with soap and water before eating, drinking, smoking, or using toilet facilities. Whenever possible, use mechanical means to move large and/or heavy objects to help prevent back injuries.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

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- Hygiene measures : No smoking, eating or drinking allowed when using this product. Wash hands before breaks and at end of work shift. Avoid Skin and Eye Contact. Containers, even those that have been emptied, will retain product residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.
- Respiratory protection : A NIOSH/MSHA approved respirator with organic vapor canister or self-contained breathing apparatus is recommended if there is insufficient ventilation to maintain exposures below the PEL and/or level of comfort.
- Hand protection : Wear protective gloves such as: Neoprene or Buna-N.
- Eye protection : Chemical splash proof goggles.
- Protective clothing : Wear a chemical resistant butyl rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.
- Engineering controls : Provide sufficient ventilation to maintain exposure below established exposure limits and to avoid effects of overexposure. This product may contain up to 300ppm residual methyl chloride which, during normal operations, is not expected to present a hazard to employees handling this product. Methyl chloride, however, may accumulate in the headspace of storage tanks, and in tank wagons and tank cars during transport and storage. Employees may be exposed, when manholes are opened, to high concentrations of methyl chloride unless adequate ventilation is provided or respiratory protection is used.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : Liquid
Colour : Pale Yellow
Odour : Alcohol
Density : 0.92 g/cm³
- Weight per volume : 7.66 Lb/Gal
- Relative vapour density : Heavier than air
- Water solubility : Dispersible

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pH : approx. 7 - 9
At 10%, in water.

Evaporation rate : Slower than ether

Volatile organic compound : Percent Water:10 - 20 %

10. STABILITY AND REACTIVITY

Conditions to avoid : Avoid heat, flame and contact with strong oxidizing agents.

Hazardous polymerisation : No

Stability : Yes

11. TOXICOLOGICAL INFORMATION

Skin irritation : This material is corrosive to the skin.

Eye irritation : This material is corrosive to eyes.

12. ECOLOGICAL INFORMATION

Further ecological information

Ecological notes : This product is toxic to fish: prevent run-off to sewers, streams or other bodies of water.

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13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

Product disposal and disposal requirements : This product is an Ignitable waste (D001) under current RCRA regulations. Incineration in an authorized and permitted thermal treatment facility is recommended. Inquire of a permitted TSD facility for other options.

14. TRANSPORT INFORMATION

Sea transport

IMDG:

Class	: 3
UN-No	: 2924
PG	: II
MFAG	:
EmS	: F-E S-C
Proper shipping name	: FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Hazard release	: Ethanol Methyl Trialkyl Ammonium Chloride
Label	: 3, 8

Air transport

ICAO/IATA:

Class	: 3
UN-No	: 2924
PG	: II
Proper shipping name	: Flammable liquid, corrosive, n.o.s.
Hazard release	: Ethanol Methyl Trialkyl Ammonium Chloride
Label	: 3, 8

DOT (Department of Transportation)

CFR Road:

Class	: 3
UN-No	: 2924
PG	: II
Proper shipping name	: Flammable liquids, corrosive, n.o.s.
Correct technical name	: Ethanol Methyl Trialkyl Ammonium Chloride
Label	: 38

CFR Rail:

Class	: 3
UN-No	: 2924
PG	: II

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Proper shipping name : Flammable liquids, corrosive, n.o.s.
Correct technical name : Ethanol Methyl Trialkyl Ammonium Chloride
Label : 38

CANADA Transport of Dangerous goods

TDG Road:

Class : 3
UN-No : 2924
PG : II
Proper shipping name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Correct technical name : Ethanol Methyl Trialkyl Ammonium Chloride
Label : 38

TDG Rail:

Class : 3
UN-No : 2924
PG : II
Proper shipping name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Correct technical name : Ethanol Methyl Trialkyl Ammonium Chloride
Label : 38

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15. REGULATORY INFORMATION

United States

SARA Section 311/312 : Fire: Yes
 Pressure generating: No
 Reactivity: No
 Acute: Yes
 Chronic: No

SARA Sections : SECTION 313
 Notification : Yes
 This product contains 0.03% Methyl Chloride (CASRN 74-87-3).

Components	CAS-No.
Methyl Chloride	74-87-3

Notification Status : TSCA
 Notification : Yes
 All intentional ingredients are listed in the TSCA Inventory or comply with TSCA Polymer Exemption criteria per 40 CFR 723.

California Proposition 65 Statement : Notification : Yes
 This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive effects.

Components	CAS-No.
Methyl Chloride	74-87-3

CERCLA : CAS 74-87-3 : 100 lb

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Canada : WHMIS CLASSIFICATION
Class B, Division 2, Flammable Liquid
Class E, Corrosive

This product contains component(s) that are listed on the WHMIS Ingredient Disclosure List.

Components	CAS-No.
Methyl Chloride	74-87-3
Ethanol	64-17-5

Notification Status : Canadian Environmental Protection Act
DSL
Notification : Yes
All intentional ingredients are listed on the DSL (Domestic Substance List) or have been notified pursuant to the NSN regulations.

16. OTHER INFORMATION

HMIS Codes : Fire : 3
Health : 3
Physical Hazard : 0
Protection : X

Manufacturer disclaimer : While the information and recommendations contained herein are believed to be accurate, we make no warranty with respect hereto and disclaim all liability from reliance thereon