SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Eicosane

Product Number : 219274
Brand : Aldrich
CAS-No. : 112-95-8

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Aspiration hazard (Category 1), H304

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word : Danger

Hazard statement(s)
H304 : May be fatal if swallowed and enters airways.

Precautionary statement(s)
P301 + P310 : IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances
Formula: C\textsubscript{20}H\textsubscript{42}
Molecular weight: 282.56 g/mol
CAS-No.: 112-95-8
EC-No.: 204-018-1

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>Icosane</td>
<td>Asp. Tox. 1; H304</td>
<td>&lt;= 100 %</td>
</tr>
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For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures
   General advice
   Show this material safety data sheet to the doctor in attendance.

   If inhaled
   After inhalation: fresh air.

   In case of skin contact
   In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

   In case of eye contact
   After eye contact: rinse out with plenty of water. Remove contact lenses.

   If swallowed

4.2 Most important symptoms and effects, both acute and delayed
   The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
   No data available
SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
- Carbon dioxide (CO2)
- Foam
- Dry powder

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters
In the event of fire, wear self-contained breathing apparatus.

5.4 Further information
Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.
Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
- Tightly closed. Dry. Keep locked up or in an area accessible only to qualified or authorized persons.
- Storage class (TRGS 510): 11: Combustible Solids

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters
Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls
Change contaminated clothing. Wash hands after working with substance.

Personal protective equipment

Eye/face protection
Use equipment for eye protection tested and approved under appropriate
government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection
This recommendation applies only to the product stated in the safety data sheet,
supplied by us and for the designated use. When dissolving in or mixing with other
substances and under conditions deviating from those stated in EN374 please
contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,
Internet: www.kcl.de).

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet,
supplied by us and for the designated use. When dissolving in or mixing with other
substances and under conditions deviating from those stated in EN374 please
contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,
Internet: www.kcl.de).

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatril® L

Body Protection
protective clothing

Respiratory protection
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following
standards: DIN EN 143, DIN 14387 and other accompanying standards relating to
the used respiratory protection system.

Control of environmental exposure
Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance  Form: solid
b) Odor
   Color: colorless
   Odor: odorless

c) Odor Threshold
   No data available

d) pH
   No data available

e) Melting point/freezing point
   Melting point/range: 35 - 37 °C (95 - 99 °F) - lit.

f) Initial boiling point and boiling range
   220 °C 428 °F at 40 hPa - lit.

g) Flash point
   Not applicable

h) Evaporation rate
   No data available

i) Flammability (solid, gas)
   No data available

j) Upper/lower flammability or explosive limits
   No data available

k) Vapor pressure
   0.014 hPa at 40 °C (104 °F) - (Lit.)

l) Vapor density
   No data available

m) Relative density
   0.7889 g/cm3 at 20 °C (68 °F)

n) Water solubility
   No data available

o) Partition coefficient: n-octanol/water
   No data available

p) Autoignition temperature
   202 °C (396 °F) at 1,013 hPa

q) Decomposition temperature
   No data available

r) Viscosity
   5.36 mm2/s at 40 °C (104 °F) - (ECHA)

s) Explosive properties
   No data available

t) Oxidizing properties
   No data available

9.2 Other safety information
   Bulk density 789 kg/m3
   Surface tension 27.3 mN/m at 40 °C (104 °F)

SECTION 10: Stability and reactivity

10.1 Reactivity
   The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability
   The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions
   Violent reactions possible with:
Strong oxidizing agents

10.4 **Conditions to avoid**
no information available

10.5 **Incompatible materials**
Strong oxidizing agents

10.6 **Hazardous decomposition products**
In the event of fire: see section 5

**SECTION 11: Toxicological information**

11.1 **Information on toxicological effects**

- **Acute toxicity**
  - LD50 Oral - Rat - male and female - > 5,000 mg/kg (OECD Test Guideline 401)
  - LC50 Inhalation - Rat - male and female - 4 h - > 5,266 mg/m3 (OECD Test Guideline 403)
  - LD50 Dermal - Rabbit - male and female - > 3,160 mg/kg (OECD Test Guideline 402)
  - No data available

- **Skin corrosion/irritation**
  - Skin - Rabbit
  - Result: No skin irritation (OECD Test Guideline 404)

- **Serious eye damage/eye irritation**
  - Eyes - Rabbit
  - Result: No eye irritation (OECD Test Guideline 405)

- **Respiratory or skin sensitization**
  - Maximization Test - Guinea pig
  - Result: Not a skin sensitizer. (OECD Test Guideline 406)

- **Germ cell mutagenicity**
  - Ames test
  - S. typhimurium
  - Result: negative
  - In vitro mammalian cell gene mutation test
  - mouse lymphoma cells
  - Result: negative
  - OECD Test Guideline 474
  - Mouse - male and female - Bone marrow
  - Result: negative

- **Carcinogenicity**
  - IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
  - NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
May be fatal if swallowed and enters airways.

### 11.2 Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

### SECTION 12: Ecological information

#### 12.1 Toxicity
No data available

Toxicity to bacteria

#### 12.2 Persistence and degradability

- **Biodegradability**
  - aerobic - Exposure time 28 d
  - Result: 74 % - Readily biodegradable.
  - (OECD Test Guideline 306)

#### 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

Discharge into the environment must be avoided.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

**Product**
Waste material must be disposed of in accordance with the national and local waste management regulations. No mixing with other waste. Handle uncleaned containers like the product. See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

**DOT (US)**
Not dangerous goods

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

**Further information**
Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

**SARA 302 Components**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
No SARA Hazards

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

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**New Jersey Right To Know Components**

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SECTION 16: Other information

Further information
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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