

## SAFETY DATA SHEET

Version 4.7  
Revision Date 02/03/2015  
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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	1-Heptanol	
Product Number	:	H2805	
Brand	:	Aldrich	
Product Use	:	For laboratory research purposes.	
Supplier	:	Sigma-Aldrich Canada Co. 2149 Winston Park Drive OAKVILLE ON L6H 6J8 CANADA	Manufacturer : Sigma-Aldrich Corporation 3050 Spruce St. St. Louis, Missouri 63103 USA
Telephone	:	+1 9058299500	
Fax	:	+1 9058299292	
Emergency Phone # (For both supplier and manufacturer)	:	+1-703-527-3887 (CHEMTREC)	
Preparation Information	:	Sigma-Aldrich Corporation Product Safety - Americas Region 1-800-521-8956	

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

##### WHMIS Classification

B3	Combustible Liquid	Combustible Liquid
D2B	Toxic Material Causing Other Toxic Effects	Moderate eye irritant

##### GHS Classification

Flammable liquids (Category 4)  
Eye irritation (Category 2A)  
Acute aquatic toxicity (Category 3)

##### GHS Label elements, including precautionary statements

Pictogram



Signal word: Warning

Hazard statement(s)

H227	Combustible liquid.
H319	Causes serious eye irritation.
H402	Harmful to aquatic life.

Precautionary statement(s)

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

##### HMIS Classification

Health hazard:	2
Flammability:	2
Physical hazards:	0

##### Potential Health Effects

###### Inhalation

May be harmful if inhaled. Causes respiratory tract irritation.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.  
**Eyes** Causes eye irritation.  
**Ingestion** May be harmful if swallowed.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Heptyl alcohol  
Formula : C<sub>7</sub>H<sub>16</sub>O  
Molecular weight : 116.20 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>Heptan-1-ol</b>			
111-70-6	203-897-9	-	<=100%

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### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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### 5. FIREFIGHTING MEASURES

#### Conditions of flammability

Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

#### Explosion data - sensitivity to mechanical impact

No data available

#### Explosion data - sensitivity to static discharge

No data available

#### Further information

Use water spray to cool unopened containers.

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### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

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## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 480 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

##### Splash contact

Material: Nature latex/chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 60 min

Material tested: Lapren® (KCL 706 / Aldrich Z677558, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374  
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form clear, liquid

Colour colourless

## Safety data

pH	No data available
Melting point/freezing point	Melting point/range: -36 °C (-33 °F) - lit.
Boiling point	176 °C (349 °F) - lit.
Flash point	76 °C (169 °F) - closed cup - Tested according to Annex V of Directive 67/548/EEC.
Ignition temperature	292 °C (558 °F) - Auto-flammability
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	0.7 hPa (0.5 mmHg) at 20 °C (68 °F) - Tested according to Annex V of Directive 67/548/EEC. 1 hPa (1 mmHg) at 25 °C (77 °F) - Tested according to Annex V of Directive 67/548/EEC.
Density	0.822 g/cm <sup>3</sup> at 25 °C (77 °F) - lit.
Water solubility	1.63 g/l at 20 °C (68 °F) - OECD Test Guideline 105
Partition coefficient: n-octanol/water	log Pow: 2.2 at 20 °C (68 °F) - OECD Test Guideline 107
Relative vapour density	No data available
Odour	No data available
Odour Threshold	No data available
Evaporation rate	No data available

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

No data available

### Conditions to avoid

Heat, flames and sparks.

### Materials to avoid

Strong oxidizing agents, Acid chlorides, Acid anhydrides

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides  
Other decomposition products - No data available

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

LD50 Oral - Rat - female - 5,500 mg/kg

#### Inhalation LC50

LC0 Inhalation - Rat - 4 h - > 7.4 mg/l

#### Dermal LD50

LD50 Dermal - Rabbit - > 2,000 mg/kg

**Other information on acute toxicity**

No data available

**Skin corrosion/irritation**

Skin - Rabbit - No skin irritation - 24 h - OECD Test Guideline 404

**Serious eye damage/eye irritation**

Eyes - Rabbit - Irritating to eyes. - 24 h - OECD Test Guideline 405

**Respiratory or skin sensitisation**

Maximisation Test (GPMT) - Guinea pig - OECD Test Guideline 406 - Did not cause sensitisation on laboratory animals.

**Germ cell mutagenicity**

Genotoxicity in vitro - S. typhimurium - negative

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**Reproductive toxicity**

No data available

**Teratogenicity**

No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

No data available

**Aspiration hazard**

No data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	Causes eye irritation.

**Signs and Symptoms of Exposure**

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

**Synergistic effects**

No data available

**Additional Information**

RTECS: MK0350000

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**12. ECOLOGICAL INFORMATION****Toxicity**

Toxicity to fish	static test LC50 - Pimephales promelas (fathead minnow) - 37.9 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - Daphnia magna (Water flea) - 84 mg/l - 48 h

**Persistence and degradability**

Biodegradability	aerobic
	Result: 84 % - Readily biodegradable

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**PBT and vPvB assessment**

No data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

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**13. DISPOSAL CONSIDERATIONS**

**Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION**

**DOT (US)**

NA-Number: 1993 Class: NONE Packing group: III  
Proper shipping name: Combustible liquid, n.o.s. (Heptan-1-ol)  
Reportable Quantity (RQ):  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

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**15. REGULATORY INFORMATION**

**WHMIS Classification**

B3	Combustible Liquid	Combustible Liquid
D2B	Toxic Material Causing Other Toxic Effects	Moderate eye irritant

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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**16. OTHER INFORMATION**

**Text of H-code(s) and R-phrases mentioned in Section 3**

**Further information**

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