



Material Safety Data Sheet

1-Octanol

MSDS# 17270

Section 1 - Chemical Product and Company Identification

MSDS Name: 1-Octanol

Catalog Numbers: AC150630000, AC150630010, AC150630025, AC150630250, AC220180000, AC220180010

Synonyms: Capryl alcohol; n-Octanol; n-Octyl alcohol; n-Caprylic alcohol; Octyl alcohol; Octan-1-ol.

Company Identification: Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
For information in the US, call: 201-796-7100  
Emergency Number US: 201-796-7100  
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#: 111-87-5  
Chemical Name: 1-Octanol  
%: > 98  
EINECS#: 203-917-6

Hazard Symbols: XI



Risk Phrases: 36/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Combustible liquid and vapor. May cause respiratory tract irritation. May cause central nervous system depression. Causes eye and skin irritation. Target Organs: Central nervous system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation. May cause transient corneal injury.  
Skin: May cause mild skin irritation. May be absorbed through the skin. Prolonged or repeated contact may dry/defat the skin and cause irritation.  
Ingestion: May cause digestive tract disturbances.  
Inhalation: May cause respiratory tract irritation.  
Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.  
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.  
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.  
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to  
Physician:

### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Combustible liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. This liquid floats on water and may travel to a source of ignition and spread fire.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: 273 deg C ( 523.40 deg F)

Flash Point: 81 deg C ( 177.80 deg F)

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 2; flammability: 2; instability: 0;

### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Use only with adequate ventilation. Keep away from heat and flame. Avoid breathing vapor or mist.

Storage: Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1-Octanol	none listed	none listed	none listed

OSHA Vacated PELs: 1-Octanol: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: clear, colorless

Odor: penetrating odor - sweetish odor

pH: Not available

Vapor Pressure: 0.08 mm Hg @ 25 deg C

Vapor Density: 4.5 (air=1)

Evaporation Rate: 0.007 (butyl acetate=1)

Viscosity: Not available

Boiling Point: 195 deg C ( 383.00°F)

Freezing/Melting Point: -16 deg C ( 3.20°F)

Decomposition Temperature: Not available

Solubility in water: Insoluble

Specific Gravity/Density: 0.8240

Molecular Formula: C8H18O

Molecular Weight: 130.23

#### Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Ignition sources, excess heat.
Incompatibilities with Other Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide.
Hazardous Polymerization	Has not been reported.

#### Section 11 - Toxicological Information

RTECS#: CAS# 111-87-5: RH6550000

RTECS:

**CAS# 111-87-5:** Dermal, guinea pig: LD50 = >1 gm/kg;

Draize test, rabbit, skin: 500 mg/24H Mild;

LD50/LC50: Oral, mouse: LD50 = 1790 mg/kg;

Oral, mouse: LD50 = 15000 mg/kg;

Oral, rat: LD50 = >3200 mg/kg;

Oral, rat: LD50 = 20000 mg/kg;

Carcinogenicity: 1-Octanol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

#### Section 12 - Ecological Information

Fish: Fathead Minnow: LC50 = 13.5 mg/L; 96 Hr.; Flow-through Condition

Ecotoxicity: Fish: Rainbow trout: LC50 = 18.0 mg/L; 96 Hr.; Unspecified

Water flea Daphnia: EC50 = 23.0 mg/L; 96 Hr.; Unspecified

Bacteria: Phytobacterium phosphoreum: EC50 = 3.7-7.3 mg/L; 30 minutes; Microtox test

Other: If spilled into U.S. waters, it may be reportable under 33 CFR Part 153 if it produces a sheen.

#### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

#### Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

#### Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36/38 Irritating to eyes and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 111-87-5: 1

Canada

CAS# 111-87-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: B3, D2B

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

CAS# 111-87-5 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 111-87-5 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 6/08/1999

Revision #8 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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