

octan-1-ol 111-87-5 MSDS

Section 1 - Chemical Product

MSDS Name: 1-Octanol 98% Material Safety Data Sheet

Synonym: Capryl alcohol; n-Octanol; n-Octyl alcohol; n-Caprylic alcohol; Octyl alcohol

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
111-87-5	1-Octanol	98.0	203-917-6

Hazard Symbols: XI

Risk Phrases: 36

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Irritating to eyes.

Potential Health Effects

Eye:

May cause eye irritation. Vapors may cause 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. Possible aspiration hazard.

Inhalation:

May cause respiratory tract irritation.

Chronic:

No information found.

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.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. 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:

For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

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. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation.

Keep away from heat and flame. Avoid breathing vapor or mist.

Storage:

Keep away from heat and flame. Store in a tightly closed container.

Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

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.

Personal Protective Equipment Eyes: Wear chemical 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.

Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

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
Viscosity: Not available.
Boiling Point: 195 deg C
Freezing/Melting Point: -16 deg C
Autoignition Temperature: 523 deg F (272.78 deg C)
Flash Point: 178 deg F (81.11 deg C)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
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:
Acids, acid chlorides, 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 LD50/LC50:
CAS# 111-87-5: Dermal, guinea pig: LD50 = >1 gm/kg; Draize test, rabbit, skin: 500 mg/24H Mild;
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 by ACGIH, IARC, or NTP.
Other:
See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

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

IATA

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

IMO

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

RID/ADR

Shipping Name: Not regulated.

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 Irritating to eyes.

Safety Phrases:

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

S 39 Wear eye/face protection.

WGK (Water Danger/Protection)

CAS# 111-87-5: 1

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

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

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

Exposure Limits

CAS# 111-87-5: OEL-RUSSIA:STEL 10 mg/m³

US FEDERAL

TSCA

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

SECTION 16 - ADDITIONAL INFORMATION

N/A