# SAFETY DATA SHEET



#### 1. Identification

Product identifier Octyl alcohol

Other means of identification

Product code N-12718

Synonym(s) 1-Octanol \* CAPRYLIC ALCOHOL

**Recommended use** For Laboratory Use Only

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Chem Service, Inc.
Address 660 Tower Lane

West Chester, PA 19380

**United States** 

**Telephone** Toll Free 800-452-9994

Direct 610-692-3026

Website www.chemservice.com
E-mail info@chemservice.com

Emergency phone number Chemtrec US 800-424-9300

Chemtrec outside US +1 703-527-3887

# 2. Hazard(s) identification

Physical hazardsFlammable liquidsCategory 4Health hazardsAcute toxicity, dermalCategory 4Environmental hazardsHazardous to the aquatic environment, acuteCategory 3

hazard

Hazardous to the aquatic environment, Category 3

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Combustible liquid. Harmful in contact with skin. Harmful to aquatic life. Harmful to aquatic life

with long lasting effects.

**Precautionary statement** 

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid release to the

environment. Wear protective gloves/protective clothing. Wear protective gloves/eye

protection/face protection.

Response If on skin: Wash with plenty of water. Call a poison center/doctor if you feel unwell. Specific

treatment (see this label). Take off contaminated clothing and wash before reuse. In case of fire:

Use appropriate media to extinguish.

**Storage** Store in a well-ventilated place. Keep cool.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information Not applicable.

# 3. Composition/information on ingredients

# **Substances**

Chemical name	Common name and synonyms	CAS number	%
Octyl alcohol	1-Octanol	111-87-5	100
	CAPRYLIC ALCOHOL		

Material name: Octyl alcohol SDS US

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and plenty of water. Call a POISON CENTER or doctor/physician if you feel

unwell. Get medical attention if irritation develops and persists.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

Direct contact with eyes may cause temporary irritation.

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important

Indication of immediate

treatment needed

symptoms/effects, acute and delayed

Provide general supportive measures and treat symptomatically. Keep victim under observation.

medical attention and special Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

and precautions for firefighter Fire-fighting

equipment/instructions

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Combustible liquid.

# 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Environmental precautions** 

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

### 7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.

Material name: Octyl alcohol sps us

### 8. Exposure controls/personal protection

#### Occupational exposure limits

US. Workplace Environmental Exposure Level (WEEL) Guides

MaterialTypeValueOctyl alcohol (CAS<br/>111-87-5)TWA265 mg/m350 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear eye/face protection. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves.

Other Wear suitable protective clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

limits (where applicable) or to an acceptable level (in countries where exposure limits have not

been established), an approved respirator must be worn.

clothing and protective equipment to remove contaminants.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work

# 9. Physical and chemical properties

**Appearance** 

Physical state Liquid.

Form Liquid Viscous Liquid

ColorColorlessOdorNot available.Odor thresholdNot available.pHNot available.

Melting point/freezing point 1.4 - 3.2 °F (-17 - -16 °C) Initial boiling point and boiling 381.2 - 383 °F (194 - 195 °C)

range

Flash point 178.0 °F (81.1 °C) Closed Cup

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

0.01 kPa at 25 °C 0.01 kPa at 25 °C

Vapor density 4.5

Relative density Not available.

Solubility(ies)

Vapor pressure

Solubility (water) Not available.

Partition coefficient (n-octanol/water)

3

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Material name: Octyl alcohol 14130 Version #: 01 Issue date: 05-22-2014 Other information

0.83 g/cm3 estimated Density

Dynamic viscosity 10.6 mPa.s Dynamic viscosity 59 °F (15 °C)

temperature

Flammability class Combustible IIIA estimated 12.82 mm<sup>2</sup>/s estimated Kinematic viscosity

Molecular formula C8-H18-O 130.22 g/mol Molecular weight 0.83 at 20 °C Specific gravity

## 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability** Hazardous polymerization does not occur. Possibility of hazardous

reactions

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the Conditions to avoid

flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

# 11. Toxicological information

#### Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard. Inhalation Prolonged inhalation may be harmful.

Skin contact Harmful in contact with skin.

Eye contact Direct contact with eyes may cause temporary irritation. Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

**Acute toxicity** Harmful in contact with skin. Expected to be a low hazard for usual industrial or commercial

handling by trained personnel.

Product	Species	Test Results
Octyl alcohol (CAS 111-87	7-5)	
Acute		
Dermal		
LD50	Guinea pig	> 500 mg/kg
	Rabbit	2000 - 4000 mg/kg
Oral		
LD50	Mouse	1790 mg/kg
	Rat	> 3200 mg/kg
Other		

69 mg/kg

Mouse

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Serious eye damage/eye

irritation

Respiratory or skin sensitization

LD50

Not available. Respiratory sensitization

This product is not expected to cause skin sensitization. Skin sensitization

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Material name: Octyl alcohol SDS US

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Not available. **Aspiration hazard** 

**Chronic effects** Prolonged inhalation may be harmful.

# 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

**Product Species Test Results** 

Octyl alcohol (CAS 111-87-5)

**Aquatic** 

Fish LC50 Fathead minnow (Pimephales promelas) 12.3 - 13.4 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

No data is available on the degradability of this product. Persistence and degradability

Bioaccumulative potential Not available. Partition coefficient n-octanol / water (log Kow)

No data available. Mobility in soil

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material

and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

Local disposal regulations

Dispose in accordance with all applicable regulations.

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

# 14. Transport information

DOT

**UN** number UN3082

UN proper shipping name Environmentally hazardous substances, liquid, n.o.s. (Octyl alcohol)

Transport hazard class(es)

9 Class Subsidiary risk 9 Label(s) **Packing group** 

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

8, 146, 335, IB3, T4, TP1, TP29 Special provisions

Packaging exceptions 155 203 Packaging non bulk Packaging bulk 241

**IATA** 

UN3082 UN number

**UN** proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Octyl alcohol) Transport hazard class(es)

9 Class Subsidiary risk

Material name: Octyl alcohol

Ш Packing group **Environmental hazards** No. **ERG Code** 9L

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only

Allowed.

**IMDG** 

**UN number** 

UN3082

**UN proper shipping name** 

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Octyl alcohol), MARINE

**POLLUTANT** 

Not available.

Transport hazard class(es)

Class 9 Subsidiary risk Ш Packing group

**Environmental hazards** 

Marine pollutant Yes F-A, S-F

**EmS** Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to

Annex II of MARPOL 73/78 and the IBC Code

DOT; IATA; IMDG



### Marine pollutant



# 15. Regulatory information

**US federal regulations** 

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes **Hazard categories** 

Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

Material name: Octyl alcohol

#### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

### SARA 313 (TRI reporting)

Not regulated.

#### Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

# Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

Inventory name

(SDWA)

### **US** state regulations

#### **US. Massachusetts RTK - Substance List**

Not regulated.

#### US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

### US. Pennsylvania RTK - Hazardous Substances

Octyl alcohol (CAS 111-87-5)

#### **US. Rhode Island RTK**

Not regulated.

#### **US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

#### **International Inventories**

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

### 16. Other information, including date of preparation or last revision

**Issue date** 05-22-2014

Version # 01

NFPA ratings Health: 1

Flammability: 2 Instability: 0

Material name: Octyl alcohol sps us

On inventory (yes/no)\*

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

#### Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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Material name: Octyl alcohol sps us