

**Material Safety Data Sheet****OCTYL DECYL ALCOHOL****Section 1 - Product Identification**

Product Name : Octyl Decyl Alcohol

Company Identification : Tradeasia International Pte. Limited

Address : 133 Cecil Street # 12-03 Keck Seng Tower, Singapore

Tel: +65-6227 6365

Fax: +65-6225 6286

Email: contact@chemtradeasia.com

**Section 2 – Composition / Information on ingredients**

Chemical Name	Common Name	Typical %	CAS Number	Health Hazard
n-Decanol	Decyl Alcohol	45	112-30-1	Skin and eye irritant
n-Octanol	Octyl alcohol	50	111-87-5	Skin and eye irritant
n-Hexanol	Hexyl alcohol	2	111-27-3	Skin and eye irritant
n-Dodecanol	Lauryl alcohol	3	112-53-8	Skin and eye irritant

**Section 3 – Hazard Identification****Classification of the substance or mixture**

Classification (29CFR1910.1200 : Eye irritation category 2B.

Appendix A) : Acute skin toxicity category 5.

GHS physical hazard : Flammable liquid category 4 (combustible liquid).

GHS health hazard : Eye irritation category 2B.

: Acute skin toxicity category 5.

GHS environmental hazard : Acute aquatic toxicity category 3

**Label warnings of the substance or mixture**

Signal word : Warning.

Hazard statements : H227 Combustible liquid

Precautionary Statements : H316 Causes mild skin irritation.

: H320 Causes eye irritation.

: H402 Harmful to aquatic life.

: P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

: P264 Wash hands thoroughly after handling.

: P273 Avoid release to the environment.

: P280 Wear protective gloves/protective clothing/eye protection.

: P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to

do. Continue rinsing.

: P332+313: If skin irritation occurs: Get medical advice/attention.

: P337+313: If eye irritation persists: Get medical advice/attention.

: P370+378: In case of fire: Use carbon dioxide, foam or water for extinction.

: P403+235 Store in a well ventilated place. Keep cool.

: P501 Dispose of contents/container to an approved disposal facility only in accordance with local, state and federal

regulations.

Hazard Symbol (Pictogram) :

**Hazards not otherwise classified****Other hazards:** No additional information available**Section 4 – First-Aid Measures**

Notes to physician	Not available
Inhalation	Remove the victim into fresh air. Observe victim's breathing. If breathing is labored seek immediate medical attention.
Skin	Wash immediately with soap and water. If irritation develops, seek medical attention. Launder contaminated clothing
Eye	Rinse immediately with plenty of water for 15 minutes. Remove contact lenses if present and easy to do. If irritation persists, seek immediate medical (ophthalmologist) attention
Ingestion	Rinse mouth with plenty of water. For ingestion of large quantities seek immediate medical attention. Do not induce vomiting. Contact poison control center.

**Section 5 – Fire Fighting Measures****Suitable extinguishing media****Suitable media** : Carbon dioxide, alcohol resistant foam and water spray.**Unsuitable media** : None known.**Specific hazards arising from the substance or mixture****Direct fire hazard** : Combustible liquid.**Indirect fire hazard** : Exposure to temperature above the flash point (91°C).**Explosive hazard** : Exposure to temperature above the flash point (91°C).**Reactivity** : Reactivity with strong oxidizers.**Combustion products** : Carbon dioxide and carbon monoxide.**Special protective equipment and precautions for fire-fighters****Protective equipment** : Full protective clothing.

: Self-contained breathing apparatus.

**Precautions** : Material easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low confined areas.: May cause toxic effects if inhaled or absorbed through skin. Inhalation or contact with material may irritate or burn **skin and eyes**.

: Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation.

: Runoff from fire control or dilution water may cause pollution.

**Emergency response guide** : ERG 128.

## Section 6 – Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** : Mixture is an irritant. Mixture is a combustible liquid. If mixture is a mist, stay upwind.

**Protective equipment** : Wear rubber gloves, rubber boots, face shield and chemical hazard suit. If material is a mist wear dust mask or self contained breathing apparatus.

**Emergency procedures** : Spray the spill area with water. Contain and dissipate mist via spraying with water. If mixture is a mist, alert immediate neighborhood to close windows and doors. Mark the spill area with hazard tape or cones. Contain the spill area with suitable absorbent. Keep away from heat, sparks, open flames, hot surfaces. Keep away from streams, rivers and lakes.

### Environmental precautions

**Precautions** : Keep out of streams, rivers and lakes. Mixture is toxic to aquatic organisms. Mixture is regulated as oil under the Clean Water Act. Abide by all laws per this regulation

### Methods and materials for containment and cleanup

**Methods** : Use chemical absorbent pigs or manually spread chemical absorbent onto spill area. After the mixture is absorbed, dispose in approved waste facility.

**Materials** : Approved materials include dry earth, sand, clay, chemical absorbent, vermiculite and carbon

## Section 7 – Handling & Storage

### Precautions for safe handling

**Handling temperature** : About 10°C above the melt point (-10°C) to about 30°C.

**Handling equipment** : Ground/bond container and receiving equipment.

: Use only non-sparking tools.

: Rubber hoses, aluminum, carbon steel or stainless steel (grade 304)

### Conditions for safe storage, including any incompatibilities

**Storage area** : Store in dry area. Store at room temperature. Store in dyke area to contain any spills. Protect from heat sparks, open flames, hot surfaces.

**Packaging materials** : Polyethylene, aluminum, carbon steel, stainless steel (grade 304), rubber lined or epoxy lined tanks or drums. Graphite or rubbergaskets.

**Incompatibilities** : Strong oxidizers, inorganic acids and halogens.

## Section 8 – Exposure Controls/Personal Protection (later)

### Exposure Controls

**OSHA PEL:** None.

**ACGIH TLV:** None.

**NIOSH REL:** None.

### Appropriate engineering controls

**Engineering controls:** If mist exists, install ventilation equipped with carbon canisters. Ventilation should be 10 air exchanges per hour. Local exhaust ventilation is recommended

### Personal protection equipment

**Personal protective equipment:** Rubber gloves and safety glasses. Dust mask if mist exists.

## Section 9 – Physical and Chemical Properties

**Appearance** : Clear, colorless liquid.

**Odor** : Mild sweet pungent odor.

**Odor threshold** : No data available.

**pH** : No data available. Mixture is not readily soluble in water.

<b>Melting point</b>	: 3 - 7°C.
<b>Boiling point</b>	: Approx. 190°C.
<b>Flash point</b>	: 91°C, Tag Closed Cup.
<b>Evaporation rate</b>	: No data available.
<b>Flammability</b>	: Combustible,
<b>Lower flammability limit</b>	: 1% by volume.
<b>Upper flammability limit</b>	: 8% by volume.
<b>Vapor pressure</b>	: 8.51X10 <sup>-3</sup> mm Hg (n-decanol). : 7.94X10 <sup>-2</sup> mm Hg (n-octanol).
<b>Vapor density</b>	: 5.01 at 25°C, air = 1.0.
<b>Relative density</b>	: 0.823 at 25/25°C.
<b>Solubility</b>	: Complete in ethanol and acetone. : 37 mg/l at 25°C in water (n-decanol). : 540 mg/l at 25°C in water (n-octanol).
<b>Partition coefficient for n-octanol/water</b>	: Log Kow = 4.57 (n-decanol). : Log Kow = 3.00 (n-octanol).
<b>Auto-ignition temperature</b>	: No data available.
<b>Decomposition temperature</b>	: No data available.
<b>Viscosity</b>	: 8.0 mPas (cps) at 30°C.

#### Section 10 – Stability and Reactivity

<b>Reactivity</b>	: May react violently with oxidizers.
<b>Chemical stability</b>	: Stable under storage conditions.
<b>Possibility of hazardous reactions</b>	: Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	: Pressure, shock, static discharge or vibration does NOT result in a hazardous condition.
<b>Incompatible materials</b>	: Oxidizers, inorganic acids and halogens.
<b>Hazardous decomposition products</b>	: Carbon dioxide and carbon monoxide.

#### Section 11 – Toxicological Information

##### Information on the likely routes of exposure

Inhalation exposure : From mist or spray.

Skin exposure : From mist or spray. From splashing.

Ingestion exposure : Not a likely route of exposure.

Eye contact : From mist or spray. From splashing.

##### Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Labored breathing and irritation of the lungs may occur

Skin contact : Mild skin irritation may occur.

Ingestion : Mild irritation of the mouth, tongue, esophagus and stomach may occur.

Eye contact : Mild eye irritation may occur.

##### Delayed and immediate effects and also chronic effects from short and long term exposure

Inhalation : Chronic effects are not known.

Skin contact : Chronic effects are not known.

Ingestion : Chronic effects are not known.

Eye contact : Chronic effects are not known

#### Numerical measures of toxicity

Oral LD50 : Rat 4720 mg/kg (n-decanol).

: Rat > 5g/kg (n-octanol).

: Mouse 1800 mg/kg (n-octanol).

Skin LD50 : Rabbit 3560 mg/kg (n-decanol).

: Rabbit > 5g/kg (n-octanol).

Ingestion LD50 : Rat 2830 mg/kg.

Inhalation LD50 : No data available.

Skin primary irritation : Rabbit 4.8 (maximum score 8.0).

Eye primary irritation : Rabbit 45.8 after 3 days (maximum score 110).

#### Carcinogenicity

National Toxicology Program : Not listed.

International Agency for

Research on Cancer

: Not listed.

OSHA : Not listed.

NIOSH : Not listed.

#### Other toxicological information

Reproductive toxicity : Not classified.

Germ cell mutagenicity : Not classified.

Respiratory or skin sensitization : No data available.

Specific target organ toxicity,

single exposure

: No data available.

Specific target organ toxicity,

repeated exposure

: No data available.

Aspiration hazard : No data available.

### Section 12 – Ecological Information

#### Ecotoxicity aquatic

Fish LC50 : 2.3 mg/l 96 hour fathead minnow (n-decanol).

: 13.4 mg/l 96 hour fathead minnow (n-octanol).

: 58.9 mg/l 24 hour brine shrimp (n-octanol).

Daphnia EC50 : 20 mg/l 24 hour water flea (n-octanol).

Rotifer EC50 : No data available.

Algae EC50 : No data available.

#### Ecotoxicity terrestria

Ecotoxicity terrestrial: No data available

#### Persistence and degradability

Water : 50% 4 day BOD (n-decanol).

: 85% 28 day BOD (n-octanol).

: Rapidly degradable.

Soil : Koc = 7300 at 25 C (n-decanol).

: Koc = 1000 at 25 C (n-octanol).

Air : Immobile.  
: 1.0 days half life (n-decanol).  
: 1.3 days half life (n-octanol).

#### Bio-accumulative potential

Log Kow : 4.57 at 25°C (n-decanol).  
: 3.00 at 25°C (n-octanol).  
: The mixture has a potential to bio-concentrate.

#### Mobility in soil

Surface tension : Air 28.9 dynes/cm at 20°C (n-decanol).  
Soil mobility : Koc = 7300 at 25°C (n-decanol).  
: Koc = 1000 at 25°C (n-octanol).  
: Immobile.

#### Results of PBT and vPvB assessment

PBT and vPvB assessment : No data available.

#### Other adverse effects

Air : Not dangerous to the ozone layer.  
Water : Mild pollutant to surface of water.  
: Bio-accumulative.

### Section 13 – Disposal Considerations

#### Description of waste residues

Storage tank residues : Liquid residue from tank cleaning.  
Empty package residues : Liquid residue remaining in emptied package container.  
Transport trailer residues : Liquid residue from transport trailer cleaning.  
Absorbent material : Solid absorbent containing mixture from a spill.

#### Safe handling of waste residues

Storage tank residues : Refer to section 7 for safe handling.  
Empty package residues : Refer to section 7 for safe handling.  
Transport trailer residues : Refer to section 7 for safe handling.  
Absorbent material : Refer to section 7 for safe handling.

#### Methods of disposal

Storage tank residues : Dispose via an approved incineration facility.  
: Dispose via an approved land fill facility.  
: Dispose only in accordance with local, state and federal regulations.  
Empty package residues : Remove package to an approved package cleaning and recycling

facility.

: Dispose only in accordance with local, state and federal regulations.

Transport trailer residues : Clean transport trailer at an approved cleaning facility.

: Disposal of cleaning residues must be in accordance with local, state

and federal regulations.

Absorbent material : Dispose via an approved incineration facility.

: Dispose via an approved land fill facility.

: Dispose only in accordance with local, state and federal regulations.

#### Hazardous waste classification (RCRA)

Classification	Regulation	Listed	Hazardous waste number
Ignitability	40CFR261.21	No	
Corrosivity	40CFR261.22	No	
Reactivity	40CFR261.23	No	
Toxicity	40CFR261.24	No	

#### Section 14 – Transport Information

##### UN number

UN number : 1993.

##### UN proper shipping name

Proper shipping name : Combustible liquid, n.o.s. (Octanol)

##### Transport hazard class

Hazard class : 3.

Hazard label : Combustible liquid, n.o.s. (for class 3).

Hazard pictogram :

##### Packing group

Packing group : III (for UN1993).

##### Environmental hazards

Marine pollutant : Not Listed

##### Transport in bulk

US DOT : This product is regulated as a hazardous material according to the Department of Transportation only in bulk quantities (greater than 119 gallons per package).

IMDG : Regulated subject to the provisions.

IATA : Regulated subject to the provisions.

MARPOL 73/78 : Regulated subject to the provisions.

IBC code : IB3 (for UN1993).

#### Special precautions for user

Special precautions : No additional information available

### Section 15 – Regulatory Information

#### Safety, health and environmental regulations specific for the substance or mixture

##### US regulations

SARA 302 (40CFR355) : Not listed.

SARA 311/312 (40CFR370.66) : Fire hazard.

: Immediate (acute) health hazard. Irritant.

SARA 313 (40CFR372.65) : Not listed.

CERCLA (40CFR302.4) : Not listed.

California proposition 65 : Not listed.

German WGK class : 1 (low hazard to water).

##### Chemical inventories

TSCA USA : Listed.

AICS Australia : Listed.

DSL Canada : Listed.

EC Europe : Listed.

ECL Korea : Listed.

IECSC China : Listed.

ENCS Japan : Listed.

NzloC New Zealand : Listed.

PICCS Philippines : Listed.

SWISS Switzerland : Listed.

##### Chemical safety assessment

Safety assessment : No additional information available

### Section 16 : Additional Information

#### Hazard ratings

	Health	Flammability	Physical Hazards	Instability
HMIS (USA)	2	2	0	
NFPA (USA)	2	2		0

#### Safety Data Sheet information

Revision date (MM/DD/YY) : 09/22/2015

Supersede date (MM/DD/YY) : 11/30/2010

#### Notice to reader

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Chemical Associates – A Division of Univar USA Inc. bears responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate