# SAFETY DATA SHEET

### 1. PRODUCT

#### 1.1 Product identifiers

Name: 1-Hexadecanol CAS-No.: 36653-82-4

# 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

#### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

### 2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1 Substances

Synonyms: Palmityl alcohol

Cetyl alcohol

Formula:  $C_{16}H_{34}O$  CAS-No.: 36653-82-4 EC-No.: 253-149-0

No components need to be disclosed according to the applicable regulations.

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

# General advice

No data available

### If inhaled

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

### In case of skin contact

Wash off with soap and plenty of water.

# In case of eye contact

Flush eyes with water as a precaution.

# If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

# 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# 4.2 Indication of any immediate medical attention and special treatment needed

no data available

### 5. FIREFIGHTING MEASURES

# 5.1 Extinguishing media

# Suitable extinguishing media

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

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

no data available

### 6. ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

# 6.2 Environmental precautions

No special environmental precautions required.

### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

# 6.4 Reference to other sections

For disposal see section 13.

# 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

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

# 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

# Components with workplace control parameters

Contains no substances with occupational exposure limit values.

# 8.2 Exposure controls

# Appropriate engineering controls

General industrial hygiene practice.

# Personal protective equipment

Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin 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: 0.11 mm  Break through time: 480 min  Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)  Splash contact  Material: Nitrile rubber  Minimum layer thickness: 0.11 mm  Break through time: 480 min  Material tested:Dermatril® (KCL 740 / Aldrich Z677272, 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.
Body Protection	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmen tal exposure	No special environmental precautions required.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

Appearance	Form: solid Colour: white	
Odour	odourless	
Odour Threshold	no data available	
рН	no data available	
Melting point/freezing point	Melting point/range: 48 - 50 °C (118 - 122 °F) - lit.	
Initial boiling point and boiling range	179 - 181 °C (354 - 358 °F) at 13 hPa (10 mmHg) - lit.	
Flash point	no data available	
Evaporation rate	no data available	
Flammability (solid, gas)	no data available	
Upper/lower flammability or explosive limits	Upper explosion limit: 8 %(V) Lower explosion limit: 1 %(V)	
Vapour pressure	< 0.01 hPa (< 0.01 mmHg) at 43 °C (109 °F)	
Vapour density	8.37 - (Air = 1.0)	
Relative density	0.818 g/mL at 25 °C (77 °F)	
Water solubility	insoluble	
Partition coefficient: n-octanol/water	log Pow: 6.73 at 25 °C (77 °F)	
Auto-ignition temperature	does not ignite	
Decomposition temperature	no data available	
Viscosity	3.394 mm2/s at 100 °C (212 °F) - ASTM D 445 -	
Explosive properties	no data available	
Oxidizing properties	no data available	

# 9.2 Other safety information

Relative vapour density: 8.37 - (Air = 1.0)

#### 10.1 Reactivity

no data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

no data available

# 10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Humid air

#### 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

# 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

### **Acute toxicity**

LD50 Oral - rat - male and female - > 5,000 mg/kg

(OECD Test Guideline 401) Inhalation: no data available

LD50 Dermal - rabbit - > 2,600 mg/kg

no data available

# Skin corrosion/irritation

Skin - rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eves - rabbit

Result: No eye irritation - 72 h (OECD Test Guideline 405)

### Respiratory or skin sensitisation

Maximisation Test - guinea pig

Result: Does not cause skin sensitisation. (OECD Test Guideline 406)

# Germ cell mutagenicity

Not mutagenic in Ames Test.

Ames test S. typhimurium

Result: 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.

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

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

# Reproductive toxicity

no data available

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

# **Additional Information**

Repeated dose toxicity - rat - male - Oral - No observed adverse effect level - > 4,257 mg/kg

RTECS: MM0225000

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

### 12. ECOLOGICAL INFORMATION

# 12.1 Toxicity

Toxicity to fish	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 0.4 mg/l - 96 h (OECD Test Guideline 203) Remarks: Aquatic toxicity is unlikely due to low solubility. Toxicity to algae static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - > 1,000 mg/l - 96 h (OECD Test Guideline 201)
Toxicity to daphnia and other aquatic invertebrates	No data available
Toxicity to algae	No data available
Toxicity to bacteria	No data available

# 12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 28 d Result: 82.4 % - Readily biodegradable.
	(OECD Test Guideline 301B)

## 12.3 Bioaccumulative potential

Bioaccumulation	Leuciscus idus melanotus - 3 d - 48 µg/l
	Bioconcentration factor (BCF): 1,230

# 12.4 Mobility in soil

no data available

# 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

# 12.6 Other adverse effects

no data available

# 13. DISPOSAL CONSIDERATIONS

# 13.1 Waste treatment methods

## **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

# **Contaminated packaging**

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

# DOT (US)

Not dangerous goods

# **IMDG**

Not dangerous goods

### **IATA**

Not dangerous goods

### 15. REGULATORY INFORMATION

# **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

No SARA Hazards

# **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

# Pennsylvania Right To Know Components

Component	CAS-No.	Revision Date
Hexadecan-1-ol	36653-82-4	

### **New Jersey Right To Know Components**

Component	CAS-No.	Revision Date
Hexadecan-1-ol	36653-82-4	

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# **16. OTHER INFORMATION**

# **HMIS Rating**

Health hazard: 0

Chronic Health Hazard:

Flammability: 0

Physical Hazard 0

# **NFPA Rating**

Health hazard: 0

Fire Hazard: 0

Reactivity Hazard: 0