



*Specialized in chemicals*

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## Material Safety Data Sheet

### Cetyl alcohol

#### Section 1: Chemical Product and Company Identification

##### 1.1 Product identifiers

Molecular formula : C<sub>16</sub>H<sub>34</sub>O  
CAS Nr : 36653-82-4  
EINECS : 253-149-0  
Molecular weight : 242.44

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

Identified uses : Laboratory chemicals, Manufacture of substances

##### 1.3 Details of the supplier of the safety data sheet

Hefei TNJ Chemical Industry Co.,Ltd.

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##### 1.4 Contact Information for Emergency

: (0086) 551 65418678

#### Section 2: Hazards Identification

##### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

##### 2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

### 2.3 Other hazards - none

## Section 3: Composition and Information on Ingredients

### 3.1 Substances

Synonyms : Palmityl alcohol  
1-Hexadecanol

Formula : C<sub>16</sub>H<sub>34</sub>O

Molecular Weight : 242,44 g/mol

CAS-No. : 36653-82-4

EC-No. : 253-149-0

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

## Section 4: First Aid Measures

### 4.1 Description of first aid measures

#### 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

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

no data available

## Section 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

## Section 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.

## Section 7: Handling and Storage

### 7.1 Precautions for safe handling

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

Store in cool place. 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

## Section 8: Exposure Controls/Personal Protection

### 8.1 Control parameters

Components with workplace control parameters

### 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **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](mailto: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 environmental exposure**

No special environmental precautions required.

**Section 9: Physical and Chemical Properties**

**9.1 Information on basic physical and chemical properties**

a) Appearance	Form: solid Colour: white
b) Odour	odourless
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	Melting point/range: 49 - 51 °C
f) Initial boiling point and boiling range	190 °C at 20 hPa - lit.
g) Flash point	170 °C - ISO 2719
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	Upper explosion limit: 8 %(V) Lower explosion limit: 1 %(V)
k) Vapour pressure	< 0,01 hPa at 43 °C
l) Vapour density	8,37 - (Air = 1.0)
m) Relative density 0,805 - 0,815 g/cm <sup>3</sup> at 60 °C	
n) Water solubility	insoluble
o) Partition coefficient: noctanol/water	log Pow: 6,73 at 25 °C
p) Auto-ignition temperature	does not ignite
q) Decomposition temperature	no data available
r) Viscosity	3,394 mm <sup>2</sup> /s at 100 °C - ASTM D 445 -
s) Explosive properties	no data available
t) Oxidizing properties	no data available

**9.2 Other safety information**

Relative vapour density 8,37 - (Air = 1.0)

**Section 10: Stability and Reactivity Data**

**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

**Section 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)

LD50 Dermal - rabbit - > 2.600 mg/kg

**Skin corrosion/irritation**

Skin - rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - 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.

**Reproductive toxicity**

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.

**Section 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)

**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

**Section 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.

**Section 14: Transport Information**

**SECTION 14: Transport information**

**14.1 UN number**

ADR/RID: -

IMDG: -

IATA: -

**14.2 UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

**14.3 Transport hazard class(es)**

ADR/RID: -

IMDG: -

IATA: -

**14.4 Packaging group**

ADR/RID: -

IMDG: -

IATA: -

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.6 Special precautions for user**

no data available



## Section 15: Other Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## Section 16: Other Information

### Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. TNJ Chemical Co., Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.tnjchem.com](http://www.tnjchem.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.