Chemical Safety Data Sheet MSDS / SDS

# 2-Octyl-1-dodecanol

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

### **Product identifier**

Product name	: 2-Octyl-1-dodecanol
CBnumber	: CB4164735
CAS	: 5333-42-6
EINECS Number	: 226-242-9
Synonyms	: 2-Octyl-1-dodecanol,OCTYL DODECANOL

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

Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.	
Uses advised against	: none	

## SECTION 2: Hazards identification

### GHS Label elements, including precautionary statements

Signal word	No signal word
Hazard statement(s)	
none	
Prevention	
none	
Response	
none	
Storage	
none	
Disposal	
none	

### SECTION 3: Composition/information on ingredients

### Substance

: 2-Octyl-1-dodecanol
: 2-Octyl-1-dodecanol,OCTYL DODECANOL
: 5333-42-6
: 226-242-9
: C20H42O
: 298.55

### SECTION 4: First aid measures

### Description of first aid measures

### General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

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

### 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

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

No data available

### **SECTION 5: Firefighting measures**

### **Extinguishing media**

### Suitable extinguishing media

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

### Special hazards arising from the substance or mixture

Carbon oxides

### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### **Further information**

No data available

### SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

For personal protection see section 8.

### **Environmental precautions**

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### **Reference to other sections**

For disposal see section 13.

### SECTION 7: Handling and storage

### Precautions for safe handling

### Advice on safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

For precautions see section 2.2.

### Conditions for safe storage, including any incompatibilities

### Storage conditions

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

### 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

### control parameter

### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

### **Exposure controls**

Personal protective equipment

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 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 Regulation (EU) 2016/425 and the standard EN 374 derived from it. **Body Protection** 

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full- face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

### SECTION 9: Physical and chemical properties

#### Information on basic physicochemical properties

Appearance	colorless viscous liquid
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	Melting point/range: -1 - 1 °C - lit.
Initial boiling point and boiling range	234 - 238 °C at 44 hPa - lit.
Flash point	188 °C - open cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	No data available
limits	
Vapour pressure	< 0,001 hPa at ca.38 °C
Vapour density	No data available
Relative density	0,84 at 20 °C
Water solubility	0,0001 g/l at 23 °C - insoluble
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	
Autoignition temperature	241 °C at 1.024 hPa
Decomposition temperature	241 °C at 1.024 hPa No data available

Oxidizing	properties
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### Other safety information

No data available

### SECTION 10: Stability and reactivity

### Reactivity

No data available

### **Chemical stability**

Stable under recommended storage conditions.

### Possibility of hazardous reactions

No data available

### Conditions to avoid

No data available

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

In the event of fire: see section 5

### SECTION 11: Toxicological information

### Information on toxicological effects

### Acute toxicity LD50 Oral - Rat - male and female - > 42,33 mg/kg (OECD Test Guideline 401) LD50 Dermal - Rabbit - male and female - > 1,68 mg/kg Skin corrosion/irritation Skin - Rabbit Result: Mild skin irritation - 24 h (OECD Test Guideline 404) Serious eye damage/eye irritation Eyes - Rabbit Result: Mild eye irritation Eyes - Rabbit Result: Mild eye irritation Maximization Test - Guinea pig Result: Does not cause skin sensitization. Germ cell mutagenicity Ames test S. typhimurium Result: negative

### Carcinogenicity

IARC: No ingredient 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 toxicityNo data availableSpecific target organ toxicity - single exposureNo data availableSpecific target organ toxicity - repeated exposureNo data availableAspiration hazardNo data availableToxicityskn-rat 100 mg/24H MOD CTOIDG 94(8),41,79

### SECTION 12: Ecological information

### Toxicity

#### Toxicity to fish

static test LC50 - Leuciscus idus (Golden orfe) - 3.000 - 10.000 mg/l

- 48 h

(OECD Test Guideline 203)

### Toxicity to algae

static test EC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h

### Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 64 % - Readily biodegradable. (OECD Test Guideline 310)

### **Bioaccumulative potential**

No data available

Mobility in soil

No data available

### Results of PBT and vPvB assessment

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

### Other adverse effects

No data available

### **SECTION 13: Disposal considerations**

### Product

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

#### Incompatibilities

2-Octyl-1-dodecanol is generally compatible with most materials encountered in cosmetic and pharmaceutical formulations.

### **Contaminated packaging**

Dispose of as unused product.

### **SECTION 14: Transport information**

### **UN number**

ADR/RID: - IMDG: - IATA: -

### UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

### Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

### Packaging group

ADR/RID: - IMDG: - IATA: -

### **Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

### Special precautions for user

### **Further information**

Not classified as dangerous in the meaning of transport regulations.

### SECTION 15: Regulatory information

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

#### **Regulations on the Safety Management of Hazardous Chemicals**

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/ EC Inventory:Listed.

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/ Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

# **SECTION 16: Other information**

### Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

- CAS: Chemical Abstracts Service
- EC50: Effective Concentration 50%
- IATA: International Air Transportation Association
- IMDG: International Maritime Dangerous Goods
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- STEL: Short term exposure limit
- TWA: Time Weighted Average

### References

[1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

[3] ECHA - European Chemicals Agency, website: https://echa.europa.eu/

[4] eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

[5] ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- [10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/