

An ISO 9001: 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel: + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers Product Name: 1-Octanol, 98% Product Code: O 1255

CAS-No.: 111-87-5

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

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,

Warning

Collect spillage.

none

Causes serious eye irritation.

Wash skin thoroughly after handling.

Avoid release to the environment. Wear eye protection/ face protection.

Very toxic to aquatic life with long lasting effects.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/ attention.

Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no.: + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye irritation, (Category 2) H319: Causes serious eye irritation.

Short-term (acute) aquatic

hazard, (Category 1)

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic H412: Harmful to aquatic life with long

hazard, (Category 3) lasting effects.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word

Hazard Statements

H319

H410

Precautionary Statements

P264 P273

P280

P305 + P351 + P338

P391

Supplemental Hazard

Statements

P337 + P313

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word Warning Hazard Statements none **Precautionary Statements** none Supplemental Hazard none

Statements

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at

levels of 0.1% or higher. Ecological information:

The substance/mixture does not contain components considered to have endocrine

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disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

SECTION 3: Composition/information on ingredients

3.1 Substances Formula : C8H18O

Molecular weight: 130,23 g/mol

CAS-No.: 111-87-5 EC-No.: 203-917-6

| Component | Classification | Concentration | |
|------------------|-----------------------------|---------------|---|
| 1-Octanol | | | |
| CAS-No. 111-87-5 | Eye Irrit. 2; Aquatic Acute | <= 100 % | • |
| EC-No.203-917-6 | 1; Aquatic Chronic 3; | | |
| | H319, H400, H412 | | |
| | M-Factor - Aquatic Acute: | | |
| | 1 | | |

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

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

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

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary

failure possible after aspiration of vomit. Call a physician immediately.

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

Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water

from contaminating surface water or the ground water system.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance

contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions

(see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®).

Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed.

Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 10: Combustible liquids

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

Ingredients with workplace control parameters

Derived No Effect Level (DNEL)

| Application Area | Routes of exposure | Health effect | Value |
|------------------------|--------------------|------------------|-----------|
| Worker DNEL,acute | dermal | Systemic effects | |
| Worker DNEL,acute | inhalation | Systemic effects | 220 mg/m3 |
| Worker DNEL,acute | dermal | Systemic effects | |
| Worker DNEL,acute | inhalation | Systemic effects | 220 mg/m3 |
| Consumer DNEL,acute | dermal | Systemic effects | |
| Consumer DNEL,acute | inhalation | Systemic effects | 65 mg/m3 |
| Consumer DNEL,acute | oral | Systemic effects | |
| Consumer DNEL,longterm | dermal | Systemic effects | |
| Consumer DNEL,longterm | inhalation | Systemic effects | 65 mg/m3 |
| Consumer DNEL,longterm | oral | Systemic effects | |

Predicted No Effect Concentration (PNEC)

| Compartment | Value |
|------------------------|------------|
| Fresh water | 0,2 mg/l |
| Sea water | 0,02 mg/l |
| Sewage treatment plant | 5,5 mg/l |
| Fresh water sediment | 2,1 mg/kg |
| Sea sediment | 0,21 mg/kg |
| Soil | 1,6 mg/kg |

8.2 Exposure controls

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). Safety glasses

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Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm Break through time: 480 min

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de). Splash contact

Material: Chloroprene

Minimum layer thickness: 0,65 mm Break through time: 240 min Material tested: KCL 720 Camapren®

Body Protection protective clothing Respiratory protection

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic

compounds

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state liquid b) Color colorless

c) Odor characteristic d) Meltina

Melting point/range: -15 °C point/freezing point e) Initial boiling point 196 °C at 1.013,25 hPa

and boiling range

f) Flammability (solid,gas) No data available g) Upper/lower Lower explosion limit: 0,8 %(V) flammability or

explosive limits h) Flash point 86,5 °C at ca.101,5 hPa - ASTM D 93 i) Autoignition ca.294 °C

temperature at 1.013 hPa j) Decomposition No data available temperature

No data available k) pH I) Viscosity Viscosity, kinematic: 5,584 mm2/s at 40 °C - ASTM D 445

Viscosity, dynamic: 9,0 mPa.s at 20 °C 107 g/l at 23 °C - partly soluble log Pow: 3,5 at 23 °C m) Water solubility

n) Partition coefficient: n-octanol/water

o) Vapor pressure 0.18 hPa at 25 °C 0,8283 g/cm3 at 15,56 °C p) Density Relative density No data available

g) Relative vapour No data available density

r) Particle No data available

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characteristics

s) Explosive properties

t) Oxidizing properties

9.2 Other safety information

No data available

No data available

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature)

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Acid chlorides

Acid anhydrides

Oxidizing agents

acids

halogen compounds

Risk of explosion with:

perchloric acid

perchlorates

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) -

13,3 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia

and other aquatic

invertebrates

static test EC50 - Daphnia magna (Water flea) - 0,765 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Desmodesmus subspicatus (green algae) - 14

mg/l - 48 h

(OECD Test Guideline 201)

Toxicity to bacteria EC50 - activated sludge - 350 mg/l - 3 h

(OECD Test Guideline 209)

Toxicity to

fish(Chronic toxicity)

flow-through test NOEC - Pimephales promelas (fathead minnow) -

0,26 mg/l - 33 d

(OECD Test Guideline 210)

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Toxicity to daphnia and other aquatic

invertebrates(Chronic

toxicity)

semi-static test NOEC - Daphnia magna (Water flea) - 1 mg/l - 21 d

(OECD Test Guideline 211)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 82,2 % - Readily biodegradable.

(OECD Test Guideline 301B)

Ratio BOD/ThBOD 32 - 62 %

12.3 Bioaccumulative potential

Does not bioaccumulate.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent,

bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at

levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment: The substance/mixture does not contain components

considered to have endocrine disrupting properties

according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission

Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 3082 IMDG: 3082 IATA: 3082

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-octanol) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-octanol)

IATA: Environmentally hazardous substance, liquid, n.o.s. (1-octanol)

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group
ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: yes

14.6 Special precautions for user Tunnel restriction code : (-)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids

or > 5kg for solids.

SECTION 15: Regulatory information

 $15.1 \; \text{Safety, health and environmental regulations/legislation specific for the} \\$

substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No.

1907/2006.

National legislation

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Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1 ENVIRONMENTAL HAZARDS Other regulations
Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment
A Chemical Safety Assessment has been carried out for this substance.

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

