

# OTTO CHEMIE PVT LTD

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](mailto:info@ottokemi.com) Web : [www.ottokemi.com](http://www.ottokemi.com)

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1. Product identifiers

Product name: Diethylene glycol, GR 99%+  
Product Code: D 1687  
CAS No : 111-46-6

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,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208.  
Email [info@ottokemi.com](mailto: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

Acute toxicity, (Category 4)

H302: Harmful if swallowed.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Warning

Hazard Statements

H302

Harmful if swallowed.

Precautionary Statements

P264

Wash skin thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P301 + P312

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P501

Dispose of contents/ container to an approved waste disposal plant.  
none

Supplemental Hazard Statements

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

Warning

Hazard Statements

none

Precautionary Statements

none

Supplemental Hazard Statements

none

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 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.

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : 2,2'-Oxydiethanol  
Bis(2-hydroxyethyl) ether  
Diglycol  
2-Hydroxyethyl ether  
Formula : C<sub>4</sub>H<sub>10</sub>O<sub>3</sub>  
Molecular weight : 106,12 g/mol  
CAS-No. : 111-46-6  
EC-No. : 203-872-2

| Component                            | Classification     | Concentration |
|--------------------------------------|--------------------|---------------|
| diethylene glycol                    |                    |               |
| CAS-No. 111-46-6<br>EC-No. 203-872-2 | Acute Tox. 4; H302 | <= 100 %      |

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. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### 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

Water Foam Carbon dioxide (CO<sub>2</sub>) 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

Cool containers/tanks with water spray. 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. 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  
For precautions see section 2.2.  
7.2 Conditions for safe storage, including any incompatibilities  
Storage conditions  
Tightly closed.  
hygroscopic  
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, longterm | dermal             | Long-term systemic effects |                      |
| Worker DNEL, longterm | inhalation         | Long-term local effects    | 60 mg/m <sup>3</sup> |

Predicted No Effect Concentration (PNEC)

| Compartment                  | Value      |
|------------------------------|------------|
| Fresh water                  | 10 mg/l    |
| Sea water                    | 1 mg/l     |
| Aquatic intermittent release | 199,5 mg/l |
| Fresh water sediment         | 20,9 mg/kg |
| Soil                         | 1,53 mg/kg |
| Sewage treatment plant       | 10 mg/l    |

## 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

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](http://www.kcl.de)).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

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Material tested:KCL 741 Dermatril® L

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](http://www.kcl.de)).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

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

The entrepreneur 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

odorless

d) Melting

Melting point/range: -10 °C

point/freezing point

e) Initial boiling point

245 °C

and boiling range

f) Flammability (solid,

No data available

gas)

g) Upper/lower

Upper explosion limit: 37 %(V)

flammability or

Lower explosion limit: 1,7 %(V)

explosive limits

h) Flash point

138 °C - closed cup

i) Autoignition

372 °C

temperature

at 1.013,25 hPa

j) Decomposition

Distillable in an undecomposed state at normal pressure.

temperature

k) pH

6 - 8 at 200 g/l at 20 °C

l) Viscosity

Viscosity, kinematic: No data available

Viscosity, dynamic: 30 mPa.s at 25 °C

m) Water solubility

1.000 g/l at 20 °C - miscible

n) Partition coefficient:

log Pow: -1,98 at 25 °C - Bioaccumulation is not expected.,

n-octanol/water

(IUCLID)

o) Vapor pressure

< 0,1 hPa at 25 °C

p) Density

1,118 g/mL at 25 °C

Relative density

1,118 at 20 °C

q) Relative vapor

3,66

density

r) Particle

No data available

characteristics

s) Explosive properties

No data available

t) Oxidizing properties

none

9.2 Other safety information

Relative vapor

3,66

density

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## 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:

Strong oxidizing agents

Zinc

Exothermic reaction with:

Strong acids

### 10.4 Conditions to avoid

Heating in air. Exposure to moisture.

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) -

75.222 mg/l - 96 h

Remarks: (ECHA)

Toxicity to daphnia

and other aquatic

invertebrates

static test LC50 - Daphnia magna (Water flea) - 62.630 mg/l - 48 h

Toxicity to algae static test NOEC - Pseudokirchneriella subcapitata - > 100 mg/l - 72

h

(OECD Test Guideline 201)

Toxicity to bacteria static test EC20 - activated sludge - > 1.995 mg/l - 30 min

(ISO 8192)

Toxicity to

fish(Chronic toxicity)

flow-through test LC50 - Menidia peninsulae - > 1.500 mg/l - 28 d

Remarks: (ECHA)

flow-through test NOEC - Menidia peninsulae - > 40 mg/l - 28 d

Remarks: (ECHA)

Toxicity to daphnia

and other aquatic

invertebrates(Chronic

toxicity)

flow-through test LC50 - Mysidopsis bahia (opossum shrimp) - >

1.000 mg/l - 23 d

Remarks: (ECHA)

flow-through test NOEC - Mysidopsis bahia (opossum shrimp) - >=

1.000 mg/l - 23 d

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Remarks: (ECHA)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 10 d

Result: 90 % - Readily biodegradable.

(OECD Test Guideline 301A)

Theoretical oxygen

demand

1.510 mg/g

Remarks: (Lit.)

Ratio BOD/ThBOD 1,3 - 10 %

Remarks: (Lit.)

12.3 Bioaccumulative potential

No data available

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](http://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: -

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

Further information

Not classified as dangerous in the meaning of transport regulations.

## SECTION 15: Regulatory information

15.1 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.

Authorisations and/or restrictions on use

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or

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stricter national regulations where applicable.

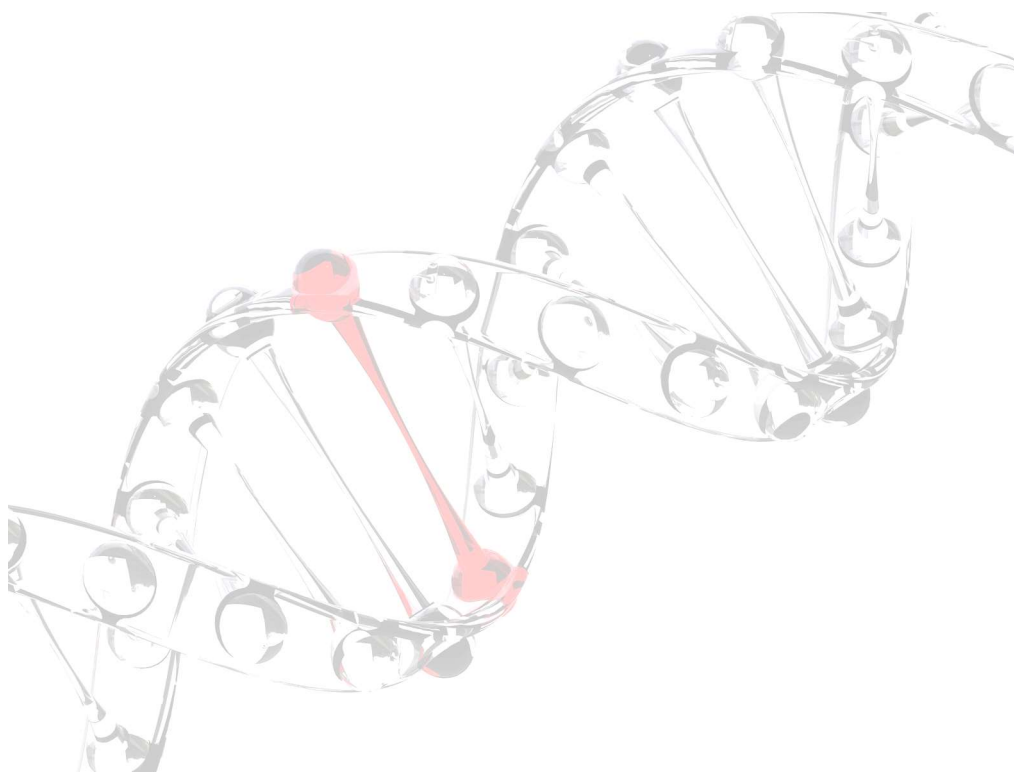
Take note of Dir 94/33/EC on the protection of young people at work.

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.



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