

# **SAFETY DATA SHEET**

Version: 1.1

**Revision Date:** 2022-09-07 **Print Date:** 2022-09-07

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

### 1.1 Product identifiers

Product Number: 00008

**Product name:** o-Phthaldialdehyde

CAS Registry Nr: 643-79-8

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

Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the safety data sheet

Company:	Chemodex AG
	CH - 9000 St. Gallen
	Switzerland, Europe
	Tel: +41 71 244 48 25
	Fax: +41 71 244 48 26
	Email: info@chemodex.com
	Website: www.chemodex.com

# 1.4 Emergency telephone number

**Tox Info Suisse:** 145 or +41 44 251 51 51

#### **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008

Acute toxicity, Oral (Category 3)	H301
Skin corrosion (Sub-category 1B)	H314
Serious eye damage (Category 1)	H318
Skin sensitization (Category 1)	H317

Specific target organ toxicity - single exposure	H335		
(Category 3), Respiratory system			
Short-term (acute) aquatic hazard (Category 1)	H400		
Long-term (chronic) aquatic hazard (Category 1)	H410		
For the full text of the H-Statements mentioned in this Section, see Section 16.			

### 2.2 Label elements

# Labelling according Regulation (EC) No. 1272/2008



# Hazard statement(s)

` '	
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

# Precautionary statement(s)

<del>_</del>	• •
P260	Do not breathe dusts or mists.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

### 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.

# **SECTION 3: Composition/information on ingredients**

# 3.1 Substances

Synonyms:	o-Phthalaldehyde o-Phthalic dicarboxaldehyde Benzene-1,2-dicarboxaldehyde OPA
Mol. Formula:	C8H6O2
Mol. Weight:	134.13 g/mol
CAS Registry No.:	643-79-8
EC-No.:	211-402-2

Component	Classification	Concentration
o-phthaldialdehyde		
CAS-No. 643-79-8 EC-No. 211-402-2	Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H301, H314, H318, H317, H335, H400, H410 M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 10	<= 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

Consult a physician. Show this 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.

### 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, Hydrogen fluoride, silicon 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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Pick up and arrange disposal without creating dust. 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

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. 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. Protect from light and moisture. Store at +4°C.

### 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

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

### Appropriate engineering controls

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

### 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.

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**

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 particle respirator type N100 (US) or type P3 (EN 143) 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

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

a)	Appearance:	Colour: Light yellow Form: Powder
b)	Odour:	No data available
c)	Odour Threshold:	No data available
d)	pH:	No data available
e)	Melting point/freezing point:	55-58 °C (lit.)

f)	Initial boiling point and boiling range:	83 °C at 0.8 mmHg
g)	Flash point:	No data available
h)	Evaporation rate:	No data available
i)	Flammability (solid, gas):	No data available
j)	Upper/lower flammability or explosive limits:	No data available
k)	Vapour pressure:	No data available
l)	Vapour density:	No data available
m)	Relative density:	~1.2 g/cm3 (Predicted)
n)	Water solubility:	Soluble in acetone or methanol.
0)	Partition coefficient (n-octanol/water):	No data available
p)	Auto-ignition temperature:	No data available
q)	Decomposition temperature:	No data available
r)	Viscosity:	No data available
s)	Explosive properties:	No data available
t)	Oxidizing properties:	No data available

### 9.2 Other safety information

No data available

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No data available

# 10.2 Chemical stability

Stable for at least 2 years 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

### 10.6 Hazardous decomposition products

No data available

### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - male and female - 178 mg/kg

(OECD Test Guideline 401)

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns. - 4 h (OECD Test Guideline 404)

### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

Maximization Test - Guinea pig

Result: Causes sensitization.

(OECD Test Guideline 406)

### Germ cell mutagenicity

No data available

Ames test

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

May cause respiratory irritation.

# Specific target organ toxicity - repeated exposure

No data available

### **Aspiration hazard**

No data available

#### Additional Information

RTECS: TH6950000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., 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

LC50 - Oncorhynchus mykiss (rainbow trout) - 0,07 mg/l - 96 h

Remarks: (ECOTOX Database)

### Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 0,087 mg/l - 48 h

static test EC50 - Daphnia magna (Water flea) - 0,11 mg/l - 48 h (OECD Test Guideline 202)

#### Toxicity to algae

static test EC50 - Pseudokirchneriella subcapitata (green algae) - 0,22 mg/l - 96 h Remarks: (ECOTOX Database)

#### Toxicity to bacteria

static test EC50 - activated sludge - 76,6 mg/l - 3 h (OECD Test Guideline 209) static test NOEC - activated sludge - 9,8 mg/l - 3 h (OECD Test Guideline 209)

### 12.2 Persistence and degradability

No data available

Biodegradability:

aerobic - Exposure time 28 d Result: 7 % - Not readily biodegradable. (OECD Test Guideline 301B)

### 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 Other adverse effects

Very toxic to aquatic life with long lasting effects.

Discharge into the environment must be avoided.

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

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

### Contaminated packaging

Dispose of as unused product.

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

14.1 - 14.5 UN number and proper shipping name, Transport hazard class(es), Transport hazard class(es), Environmental hazards

#### **UN** number

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ADR/RID:	2923	IMDG: 2	2923 IATA:	2923	
$\Delta D \cap A \cap A \cap B$	2020	IIVIDO. Z	.525	2020	

### **UN** proper shipping name

ADR/RID:	CORROSIVE SOLID, TOXIC, N.O.S. (o-phthaldialdehyde)
IMDG:	CORROSIVE SOLID, TOXIC, N.O.S. (o-phthaldialdehyde)
IATA:	Corrosive solid, toxic, n.o.s. (o-phthaldialdehyde)

### Transport hazard class(es)

ADR/RID:	8 (6.1)	IMDG: 8 (6.1)	IATA:	8 (6.1)

## **Packaging group**

ADR/RID:	II	IMDG: II	IATA:	II

### **Environmental hazards**

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

### 14.6 Special precautions for user

No data available

### 14.7 Further information

No data available

### **SECTION 15: 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**

### Full text of H-Statements referred to under sections 2 and 3.

H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### **Further information**

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