

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 02 Jun 2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

2-n-Octyl-4-isothiazolin-3-one

1.1. Catalog No.:

677640

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Regulation (EC) No 1272/2008
Acute toxicity - Oral Category 3 - (H301)
Acute toxicity - Dermal Category 3 - (H311)
Acute toxicity - Inhalation (Dusts/Mists) Category 2 - (H330)
Skin corrosion/irritation Category 1 - (H314)
Serious eye damage/eye irritation Category 1 - (H318)
Skin sensitisation Category 1A - (H317)
Acute aquatic toxicity Category 1 - (H400)
Chronic aquatic toxicity Category 1 - (H410)

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2. Label elements

247-761-7

Contains Othilinone

Signal word

Danger

Hazard statements

H410 - Very toxic to aquatic life with long lasting effects

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H330 - Fatal if inhaled

EUH071 - Corrosive to the respiratory tract

Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing and eye/face protection

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P391 - Collect spillage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

2.3. Other hazards

No information available.

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

Chemical name EU - REACH (1907/2006) - Article 59(1)

- Candidate List of Substances of Very

High Concern (SVHC) for Authorisation

EU - REACH (1907/2006) - Endocrine

Disruptor Assessment List of

Substances

Othilinone - -

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name Weight-% REACH registration number

EC No Classification

according to

Regulation (EC) No.

1272/2008 [CLP]

Specific

concentration

limit (SCL)

M-Factor M-Factor

(long-term)

Othilinone

26530-20-1

100 - 247-761-7 Acute Tox. 3 (H301)

Acute Tox. 3 (H311)

Acute Tox. 2 (H330)

Skin Corr. 1 (H314)

Eye Dam. 1 (H318)

Skin Sens. 1A (H317)

(EUH071)

Aquatic Acute 1

(H400)

Aquatic Chronic 1

(H410)

Skin Sens. 1A

:: C>=0.0015%

100 100

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATE_{mix}) for classifying a mixture based on its components

Chemical name Oral LD50

mg/kg

Dermal LD50

mg/kg

Inhalation LC50 - 4

hour - dust/mist - mg/L

Inhalation LC50 - 4

hour - vapour - mg/L

Inhalation LC50 - 4

hour - gas - ppm

Octhilineone

26530-20-1

125 +

550

311 +

690

0.27 + No data available No data available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

3.1.1. Formula

C₁₁H₁₉NOS

3.1.2. Molecular Weight (g/mol)

213.34

3.1.3. CAS-No.

26530-20-1

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required

Inhalation If breathing has stopped, give artificial respiration. Get medical attention immediately.

Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way

valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.

Eye contact Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin contact Get immediate medical advice/attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe vapour or mist. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Coughing and/ or wheezing. Difficulty in breathing. Burning sensation. Itching. Rashes. Hives.

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

Note to doctors Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitisation in susceptible persons. Treat symptomatically

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours. Product is or contains a sensitizer. May cause sensitisation by skin contact.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Do not breathe vapour or mist. Keep people away from and upwind of spill/leak. Attention! Corrosive material.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash it before reuse. Do not breathe vapour or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not breathe vapour or mist. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Please refer to the manufacturers certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Protect from moisture. Store away from other materials.

7.3. Specific end use(s)

Identified uses

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

Chemical name European Union Austria Belgium Bulgaria Croatia

Octhilinone

26530-20-1

- TWA: 0.05 mg/m³

STEL 0.05 mg/m³

Ceiling: 0.05 mg/m³

H*

Sensitizer

Chemical name France Germany Germany MAK Greece Hungary

Octhilinone

26530-20-1

- TWA: 0.05 mg/m³

H*

TWA: 0.05 mg/m³

Peak: 0.1 mg/m³

*

skin sensitizer

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Chemical name Portugal Romania Slovakia Slovenia Spain

Octhilinone

26530-20-1

--- TWA: 0.05 mg/m³

STEL: STEL mg/m³

Chemical name Sweden Switzerland United Kingdom

Octhilinone

26530-20-1

- TWA: 0.05 mg/m³

STEL: 0.1 mg/m³

H*

-

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Tight sealing safety goggles. Face protection shield.

Hand protection Wear protective butyl rubber gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear suitable gloves. Impervious gloves.

Gloves

Duration of contact PPE - Glove material Glove thickness Break through time

Wear protective butyl rubber gloves

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face

protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Do not breathe vapour or mist. Contaminated work clothing should not be allowed out of the workplace.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Liquid

Appearance Liquid

Colour amber

Odour No data available.

Odour threshold No information available

9.2. Other information

Molecular weight 213.34

Molecular formula C₁₁ H₁₉ N O S

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

Property Values Remarks o Method

Melting point / freezing point No data available None known

Boiling point / boiling range 120 °C None known

Flammability (solid, gas) No data available None known

Flammability Limit in Air None known

Upper flammability or explosive limits

No data available

Lower flammability or explosive limits

No data available

Flash point No data available None known

Autoignition temperature No data available None known

Decomposition temperature None known

pH No data available None known

pH (as aqueous solution) No data available No information available

Kinematic viscosity No data available None known

Dynamic viscosity No data available None known

Water solubility Slightly soluble None known

Solubility(ies) No data available None known

Partition coefficient No data available None known

Vapour pressure 4.9 @ 25 °C

Relative density 1.04 None known

Bulk density No data available

Liquid Density No data available

Relative vapour density No data available None known
Particle characteristics
Particle Size No information available
Particle Size Distribution No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity No information available.
10.2. Chemical stability
Stability Stable under normal conditions.
Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.
10.3. Possibility of hazardous reactions
Possibility of hazardous reactions None under normal processing.
10.4. Conditions to avoid
Conditions to avoid Excessive heat. Exposure to air or moisture over prolonged periods.
10.5. Incompatible materials
Incompatible materials Acids. Bases. Oxidising agent.
Hazardous decomposition products Nitrogen oxides (NO_x). Sulphur oxides.

11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Information on likely routes of exposure
Product Information
Inhalation Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components). Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.
Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.
Skin contact Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May cause sensitisation by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Toxic in contact with skin.
Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.
Symptoms related to the physical, chemical and toxicological characteristics
Symptoms Coughing and/ or wheezing. Difficulty in breathing. Redness. Burning. May cause blindness. Itching. Rashes. Hives.
Numerical measures of toxicity
Acute toxicity
Unknown acute toxicity
Component Information
Chemical name Oral LD50 Dermal LD50 Inhalation LC50
Ochthilnone = 550 mg/kg (Rat) = 690 mg/kg (Rabbit)
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Skin corrosion/irritation Classification based on data available for ingredients. Causes burns.
Serious eye damage/eye irritation Classification based on data available for ingredients. Risk of serious damage to eyes.
Causes burns.
Respiratory or skin sensitisation May cause sensitisation by skin contact.

Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.
11.2. Information on other hazards
11.2.1. Endocrine disrupting properties
Endocrine disrupting properties No information available.
11.2.2. Other information
Other adverse effects No information available

12. ECOLOGICAL INFORMATION

12.1. Toxicity
Ecotoxicity Very toxic to aquatic life with long lasting effects.
Chemical name Algae/aquatic plants Fish Toxicity to
microorganisms
Crustacea
Octhilinone - = 0.154mg/l (96H, Fish) - = 0.25 mg/l (48H,
crustaceans)
12.2. Persistence and degradability
Persistence and degradability No information available.
12.3. Bioaccumulative potential
Bioaccumulation No information available.
12.4. Mobility in soil
Mobility in soil No information available.
12.5. Results of PBT and vPvB assessment
PBT and vPvB assessment
Chemical name PBT and vPvB assessment
Octhilinone The substance is not PBT / vPvB
12.6. Endocrine disrupting properties
Endocrine disrupting properties No information available.
12.7. Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste from residues/unused
products
Dispose of in accordance with local regulations. Dispose of waste in accordance with
environmental legislation.
Contaminated packaging Do not reuse empty containers

14. TRANSPORT INFORMATION

IATA
14.1 UN number or ID number UN2922
14.2 UN proper shipping name Corrosive liquid, toxic, n.o.s. (Octhilinone)

14.3 Transport hazard class(es) 8
Subsidiary hazard class 6.1
14.4 Packing group II
Description UN2922, Corrosive liquid, toxic, n.o.s. (Octhilinone), 8 (6.1), II
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions A3, A803
ERG Code 8P
IMDG
14.1 UN number or ID number UN2922
14.2 UN proper shipping name Corrosive liquid, toxic, n.o.s. (Octhilinone)
14.3 Transport hazard class(es) 8
Subsidiary hazard class 6.1
14.4 Packing group II
Description UN2922, Corrosive liquid, toxic, n.o.s. (Octhilinone), 8 (6.1), II, Marine pollutant
14.5 Marine pollutant P
Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 274
EmS-No F-A, S-B No information available
14.7 Maritime transport in bulk
according to IMO instruments
No information available
RID
14.1 UN number or ID number UN2922
14.2 UN proper shipping name Corrosive liquid, toxic, n.o.s. (Octhilinone)
14.3 Transport hazard class(es) 8
Subsidiary hazard class 6.1
14.4 Packing group II
Description UN2922, Corrosive liquid, toxic, n.o.s. (Octhilinone), 8 (6.1), II, Environmentally Hazardous
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 274
Classification code CT1
ADR
14.1 UN number or ID number UN2922
14.2 UN proper shipping name Corrosive liquid, toxic, n.o.s. (Octhilinone)
14.3 Transport hazard class(es) 8
Subsidiary hazard class 6.1
14.4 Packing group II
Description UN2922, Corrosive liquid, toxic, n.o.s. (Octhilinone), 8 (6.1), II, (E), Environmentally
Hazardous
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 274
Classification code CT1
Tunnel restriction code (E)

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations
Germany
Water hazard class (WGK) strongly hazardous to water (WGK 3)
European Union
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical
agents
at work.
Authorisations and/or restrictions on use:
This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)
This
product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)
DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors
Not applicable
Persistent Organic Pollutants
Not applicable
Dangerous substance category per Seveso Directive (2012/18/EU)
H2 - ACUTE TOXIC
E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1
Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

EU - Biocidal Product Regulation ((EU) 528/2012)

International Inventories

TSCA Contact supplier for inventory compliance status

DSL/NDL Contact supplier for inventory compliance status

EINECS/ELINCS Contact supplier for inventory compliance status

ENCS Contact supplier for inventory compliance status

IECSC Contact supplier for inventory compliance status

KECL Contact supplier for inventory compliance status

PICCS Contact supplier for inventory compliance status

AICS Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment has been carried out for this substance

16. OTHER INFORMATION

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. For lab use only!