Revision: 21.01.2025

Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.01.2025

Version 4 (replaces version 3)

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

· 1.1 Product identifier

· Trade name: OTTO SilOut

· UFI: DRM0-K0HC-M00X-YM9C

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

· Application of the substance / the mixture Cleaning agent/ Cleaner

· Uses advised against Observe the information in the technical data sheet

· 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Hermann Otto GmbH Krankenhausstraße 14 D-83413 Fridolfing Tel.: 0049/(0)8684/908-0

Fax.: 0049/(0)8684/908-1840

· Further information obtainable from:

Tel.: 0049- (0)8684- 908- 2363 (-4300) E-Mail: alois.parzinger@otto-chemie.de • 1.4 Emergency telephone number:

Tel.: 0049/621/60-43333 (BASF Plant fire brigade)

+44 1865 407333 (Carechem 24)

Tel.: 0049- (0) 89- 192 40 (emergency telephone no.)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

· Hazard pictograms



GHS05

· Signal word Danger

· Hazard-determining components of labelling:

Phosphoric acid, 2-ethylhexyl ester

Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P102 Keep out of reach of children.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / eye protection / face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.

· vPvB: Not applicable.

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· Determination of endocrine-disrupting properties

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This product does not contain components that are endocrine disruptors according to UK REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more.

SECTION 3: Composition/information on ingredients

· **Description:** Solvent mixture with additives.

Dangerous components:

CAS: 12645-31-7 Phosphoric acid, 2-ethylhexyl ester <50%

EINECS: 235-741-0

Reg.nr.: 01-2119896587-13-

0000

EC number: 918-481-9

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < <50%

2% aromatics

Reg.nr.: 01-2119457273-39-0000

♠ Asp. Tox. 1, H304, EUH066

Skin Corr. 1B, H314; Eye Dam. 1, H318

Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· After skin contact

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing

Do not induce vomiting; call for medical help immediately. Show container or label.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

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

Headache

Dizziness

Dizziness

Nausea

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

If swallowed or in case of vomiting, danger of entering the lungs

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- For safety reasons unsuitable extinguishing agents Water with full jet.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment: Do not inhale explosion gases or combustion gases.

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· Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent.

Dispose contaminated material as waste according to section 13.

• 6.4 Reference to other sections See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

see item 8: Personal protective equipment

· Information about fire - and explosion protection:

Protect against electrostatic charges.

Traces of flammable substances may collect in the steam chamber of enclosed systems. Keep clear ofignition sources.

Highly volatile, flammable constituents are released during processing.

Flammable gas-air mixtures may form in empty receptacles.

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Provide solvent resistant, sealed floor.

Prevent any seepage into the ground.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Store receptacle in a well ventilated area.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:
- · DNELs

12645-31-7 Phosphoric acid, 2-ethylhexyl ester

Dermal Worker, systemic (long term) 10.42 mg/kg/Tag

Inhalative Worker, systemic (acute) 36.73 mg/m3

Worker, local (acute) 6.25 mg/m3 (rat)

Worker, systemic (long term) 10.87 mg/m3 (rat)

Additional information:

The lists valid during the making were used as basis.

OEL for ingredient Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics Recommended occupational exposure limit by the manufacturer (OEL) is 184 ppm per 8-hour work

Recommended occupational exposure limit by the manufacturer (OEL) is 164 ppm per 6-hour work day

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- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Pregnant women should strictly avoid inhalation or skin contact.

· Respiratory protection:

Use suitable respiratory protective device when high concentrations are present.

- Hand protection Protective gloves.
- · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Recommended glove material: Butyl rubber, BR Recommended thickness of the material: >0,4 mm

- · Penetration time of glove material Breakthrough time: 10 30 min
- · Eye/face protection Tightly sealed goggles.
- · Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

• 9.1 Information on basic physical and chemical properties

· General Information

Physical state
Colour:
Odour:
Melting point/freezing point:

Fluid
White
Characteristic
undetermined

· Boiling point or initial boiling point and

boiling range undetermined

· Lower and upper explosion limit

Lower: not applicable
Upper: not applicable
Flash point: 65 °C

· Decomposition temperature: Not determined.

pH at 20 °C 2

· Viscosity: Not determined.

Solubility

· Water: Not determined.

· Partition coefficient n-octanol/water (log

value) Not determined.
Vapour pressure: Not determined.

Density and/or relative density

Density at 20 °C:
 Relative density
 Vapour density
 Particle characteristics
 0.9 g/cm³
 Not determined.
 Not applicable.
 undetermined

· 9.2 Other information

· Form: pasty

· **Ignition temperature:** Product is not selfigniting.

• Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Information with regard to physical hazard classes

· Aerosols Void

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· Flammable liquids Void

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SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Avoid strong heating.

· 10.3 Possibility of hazardous reactions

Danger of receptacles bursting because of high vapour pressure when heated

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised

- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: Strong oxidizing agents, alkalis, amines, strong acides
- · 10.6 Hazardous decomposition products: see item 5.2

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Oral LD50 >5,000 mg/kg (rat)

Dermal LD50 >5,000 mg/kg (rat)

Inhalative LC50/4 h mg/l (rat)

- · Skin corrosion/irritation Causes severe skin burns and eye damage.
- · Serious eye damage/irritation Causes serious eye damage.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity No further relevant information available
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties

This product does not contain components that are endocrine disruptors according to UK REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more.

- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

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Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Liquid residues must be specially treated adhering to official regulations.
- Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· 14.1 UN number or ID number

· **ADR, IMDG, IATA** UN3265

· 14.2 UN proper shipping name

· **ADR** 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC,

N.O.S. (Phosphoric acid, 2-ethylhexyl ester)

IMDG CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

(Phosphoric acid, 2-ethylhexyl ester)

· IATA CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

(containing Phosphoric acid, 2-ethylhexyl ester)

· 14.3 Transport hazard class(es)

· ADR



· Class 8 (C3) Corrosive substances.

·Label

· IMDG, IATA



· Class 8 Corrosive substances.

· Label 8

· 14.4 Packing group

· ADR, IMDG, IATA

· 14.5 Environmental hazards:

· Marine pollutant: No

• 14.6 Special precautions for user Warning: Corrosive substances.

· Hazard identification number (Kemler code): 80 · EMS Number: F-A,S-B · Segregation groups (SGG1) Acids

· Stowage Category B

· Stowage Code SW2 Clear of living quarters.

Segregation Code SG36 Stow "separated from" SGG18-alkalis.
SG49 Stow "separated from" SGG6-cyanides

· 14.7 Maritime transport in bulk according to

IMO instruments Not applicable.

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Trade name: OTTO SilOut

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· Transport/Additional information:

· ADR

· Limited quantities (LQ) 1L

· Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· Transport category 2 · Tunnel restriction code E

IMDG

· Limited quantities (LQ) 1L

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

UN 3265 CORROSIVE LIQUID, ACIDIC,

ORGANIC, N.O.S. (PHOSPHORIC ACID, 2-

ETHYLHEXYL ESTER), 8, II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Poisons Act
- Regulated explosives precursors

None of the ingredients is listed.

Regulated poisons

None of the ingredients is listed.

Reportable explosives precursors

None of the ingredients is listed.

Reportable poisons

None of the ingredients is listed.

- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- REGULATION (EU) 2019/1148
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- · National regulations
- · Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Details of international registration status:

Listed on or in accordance with the following inventories:

UK REACH - Europe listed

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Trade name: OTTO SilOut

AICS - Australia listed

DSL- Canada listed

IECSC - China listed
ENCS - Japan listed
NZIOC - New Zealand listed
PICCS - Philippines listed
ECL - Korea listed
TSCA - USA listed

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Relevant phrases

TCSI - Taiwan

H304 May be fatal if swallowed and enters airways.

not listed

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

EUH066 Repeated exposure may cause skin dryness or cracking.

Department issuing SDS: Tel.: 0049- (0)8684- 908- 2363

· Contact: Tel.: 0049- (0)8684- 908- 2363 (-4300)

Date of previous version: 13.12.2022
 Version number of previous version: 3

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning

the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Skin Corr. 1B: Skin corrosion/irritation – Category 1B Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Asp. Tox. 1: Aspiration hazard – Category 1

* Data compared to the previous version altered.

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