

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 26.03.2020

Version 2

Revision: 26.03.2020

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

- **1.1 Product identifier**
- **Trade name: OTTO Cleaner C**
- **UFI: M6X0-80F1-A00D-R5DF**
- **Product category PC9a Coatings and paints, thinners, paint removers**
- **Application of the substance / the mixture** Cleaning agent/ Cleaner
- **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)8684/908-539
- **Further information obtainable from:**  
Tel.: 0049- (0)8684- 908- 641 ( -460 )  
E-Mail: alois.parzinger@otto-chemie.de
- **1.4 Emergency telephone number:**  
Tel.: 0049- (0) 89- 192 40 (emergency telephone no.)  
Tel.: 0049/621/60-43333 (BASF Plant fire brigade)

### SECTION 2: Hazards identification

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



GHS02 flame

Flam. Liq. 2      H225 Highly flammable liquid and vapour.

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GHS08 health hazard

Asp. Tox. 1      H304 May be fatal if swallowed and enters airways.

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GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

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GHS07

Skin Irrit. 2      H315 Causes skin irritation.  
STOT SE 3      H336 May cause drowsiness or dizziness.

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS02, GHS07, GHS08, GHS09
- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane  
cyclohexane  
n-hexane
- **Hazard statements**  
H225 Highly flammable liquid and vapour.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 26.03.2020

Version 2

Revision: 26.03.2020

**Trade name: OTTO Cleaner C**

(Contd. of page 1)

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

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.

### SECTION 3: Composition/information on ingredients

**3.2 Chemical characterisation: Mixtures**· **Description:** Solvent mixture with additives.**Dangerous components:**

EC number: 921-024-6	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics,	50-100%
Reg.nr.: 01-2119475514-35-xxxx	<5% n-hexane	

⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336

CAS: 110-82-7	cyclohexane	<10%
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⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Acute 1, H400; ⚠ Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336

CAS: 110-54-3	n-hexane	<2.5%
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⚠ Flam. Liq. 2, H225; ⚠ Repr. 2, H361f; STOT RE 2, H373; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336

· **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.

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 26.03.2020

Version 2

Revision: 26.03.2020

Trade name: OTTO Cleaner C

(Contd. of page 2)

- **After swallowing**  
A person vomiting while laying on their back should be turned onto their side.  
Do not induce vomiting; call for medical help immediately. Show container or label.
- **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**  
CO<sub>2</sub>, 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.
- **Additional information** Cool endangered receptacles with water spray.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
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).  
Dispose contaminated material as waste according to item 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:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Traces of flammable substances may collect in the steam chamber of enclosed systems. Keep clear of ignition 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:**  
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.

(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 26.03.2020

Version 2

Revision: 26.03.2020

Trade name: OTTO Cleaner C

(Contd. of page 3)

Store receptacle in a well ventilated area.

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

### SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.· **8.1 Control parameters**· **Ingredients with limit values that require monitoring at the workplace:****110-82-7 cyclohexane (< 10%)**WEL Short-term value: 1050 mg/m<sup>3</sup>, 300 ppmLong-term value: 350 mg/m<sup>3</sup>, 100 ppm**110-54-3 n-hexane (< 2.5%)**WEL Long-term value: 72 mg/m<sup>3</sup>, 20 ppm· **Additional information:** The lists valid during the making were used as basis.· **8.2 Exposure controls**· **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.

· **Protection of hands:** 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 types: nitrile rubber

Recommended thickness of the material: ≥ 0.4 mm

· **Penetration time of glove material** Breakthrough time: > 30 min· **Eye 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**· **Appearance:****Form:** Fluid**Colour:** Colourless· **Odour:** Petrol-like· **Odour threshold:** Not determined.· **pH-value:** Not determined.· **Change in condition****Melting point/freezing point:** < -20 °C**Initial boiling point and boiling range:** 60-120 °C· **Flash point:** <0 °C· **Ignition temperature:** ≥200 °C· **Decomposition temperature:** Not determined.· **Auto-ignition temperature:** Product is not selfigniting.

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 26.03.2020

Version 2

Revision: 26.03.2020

Trade name: OTTO Cleaner C

(Contd. of page 4)

- **Explosive properties:** *Product is not explosive. However, formation of explosive air/vapour mixtures are possible.*
- **Explosion limits:**
  - Lower:** 0.6 Vol %
  - Upper:** 8 Vol %
- **Oxidising properties** *Not determined.*
- **Vapour pressure at 20 °C:** 61 hPa
- **Density at 20 °C:** 0.72 g/cm<sup>3</sup>
- **Relative density** *Not determined.*
- **Vapour density** *Not determined.*
- **Evaporation rate** *Not determined.*
- **Solubility in / Miscibility with Water:** *Insoluble*
- **Partition coefficient: n-octanol/water:** *Not determined.*
- **Viscosity at 40 °C:** 0.49 mm<sup>2</sup>/s
- **9.2 Other information** *No further relevant information available.*

### 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*
- **10.5 Incompatible materials:** *Strong oxidizing agents, alkalis, amines, strong acids*
- **10.6 Hazardous decomposition products:** *see item 5.2*

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** *Based on available data, the classification criteria are not met.*
- **LD/LC50 values relevant for classification:**
- Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**
- Oral LD50 >5,000 mg/kg (rat) (OECD-Prüfrichtlinie 401)
- Dermal LD50 >2,000 mg/kg (rat) (OECD-Rpüfrichtlinie 402)
- Inhalative LC50/4 h >20 mg/l (rat) (OECD-Prüfrichtlinie 403)
- 110-82-7 cyclohexane**
- Oral LD50 12,705 mg/kg (rat)
- **Primary irritant effect:**
- **Skin corrosion/irritation**  
*Causes skin irritation.*
- **Serious eye damage/irritation** *Based on available data, the classification criteria are not met.*
- **Respiratory or skin sensitisation** *Based on available data, the classification criteria are not met.*
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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**  
*May cause drowsiness or dizziness.*

(Contd. on page 6)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 26.03.2020

Version 2

Revision: 26.03.2020

Trade name: OTTO Cleaner C

(Contd. of page 5)

- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard**  
May be fatal if swallowed and enters airways.



### SECTION 12: Ecological information

- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.  
Do not allow product to reach ground water, water course or sewage system.  
Also poisonous for fish and plankton in water bodies.  
The material is harmful to the environment.  
Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 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**
  - **ADR, IMDG, IATA**
  - **14.2 UN proper shipping name**
  - **ADR**
  - **IMDG**
  - **IATA**
  - **14.3 Transport hazard class(es)**
  - **ADR**
  - **Class**
- UN1993
- 1993 FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, CYCLOHEXANE), ENVIRONMENTALLY HAZARDOUS
- FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, CYCLOHEXANE), MARINE POLLUTANT
- FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, CYCLOHEXANE)
- 

- 3 (F1) Flammable liquids.

(Contd. on page 7)

# Safety data sheet

according to 1907/2006/EC, Article 31

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Version 2

Revision: 26.03.2020

Trade name: OTTO Cleaner C

(Contd. of page 6)

· Label 3

· IMDG



· Class 3 Flammable liquids.

· Label 3

· IATA



· Class 3 Flammable liquids.

· Label 3

· 14.4 Packing group

· ADR, IMDG, IATA II

· 14.5 Environmental hazards: Product contains environmentally hazardous substances: cyclohexane, Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

· Marine pollutant: Yes

Symbol (fish and tree)

· Special marking (ADR): Symbol (fish and tree)

· 14.6 Special precautions for user Warning: Flammable liquids.

· Danger code (Kemler): 33

· EMS Number: F-E, S-E

· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

· 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 D/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 "Model Regulation": UN1993, FLAMMABLE LIQUID, N.O.S.  
(Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, CYCLOHEXANE), ENVIRONMENTALLY HAZARDOUS, 3, II

## SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· Directive 2012/18/EU

· Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

· Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

(Contd. on page 8)

# Safety data sheet

## according to 1907/2006/EC, Article 31

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Version 2

Revision: 26.03.2020

**Trade name: OTTO Cleaner C**

(Contd. of page 7)

- **National regulations**
- **Information about limitation of use:**  
Employment restrictions concerning pregnant and lactating women must be observed.  
Employment restrictions concerning juveniles must be observed.
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **Details of international registration status:**  
**Listed on or in accordance with the following inventories:**  
REACH - Europe listed  
AICS - Australia listed  
DSL - Canada listed  
IECSC - China listed  
ENCS - Japan listed  
NZIoC - New Zealand not listed  
PICCS - Philippines listed  
ECL - Korea listed  
TSCA - USA listed  
TCSI - Taiwan 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.

- **Relevant phrases**  
H225 Highly flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H361f Suspected of damaging fertility.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** Tel.: 0049- (0)8684- 908- 641
- **Contact:** Tel.: 0049- (0)8684- 908- 641 ( -460 )
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport 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)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 2: Flammable liquids – Category 2  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Repr. 2: Reproductive toxicity – Category 2  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
Asp. Tox. 1: Aspiration hazard – Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- **\* Data compared to the previous version altered.**