

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/07/2016

Reviewed on 05/10/2016

* 1 Identification

Product identifier
Trade name: Cyclopentane PU

Article number: 206621

CAS Number: 287-92-3

Index number: 601-030-00-2

**Application of the substance /
the mixture**

Solvents

Details of the supplier of the safety data sheet
Manufacturer/Supplier: Haltermann Carless Deutschland GmbH
Schlengendeich 17
D-21107 Hamburg, Germany
Tel.: +49 40 333 18 0
E-mail: Info-haltermann@h-c-s-group.com

Information department: Product Stewardship

Emergency telephone number: Infracore: +49 69 305 6418
Chemtec: +1 800 424 9300

* 2 Hazard(s) identification

Classification of the substance or mixture

Flam. Liq. 2 H225 Highly flammable liquid and vapor.
STOT SE 3 H336 May cause drowsiness or dizziness.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Label elements
GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms


GHS02 GHS07 GHS08

Signal word

Danger

Hazard-determining components
of labeling: cyclopentane

Hazard statements

H225 Highly flammable liquid and vapor.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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Classification system:
NFPA ratings (scale 0 - 4)

Health = 1
Fire = 3
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1
Fire = 3
Reactivity = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances
CAS No. Description 287-92-3 cyclopentane

Identification number(s)
Index number: 601-030-00-2

* 4 First-aid measures

Description of first aid measures

General information:	Immediately remove any clothing soiled by the product.
After inhalation:	Supply fresh air; consult doctor in case of complaints.
After skin contact:	Immediately rinse with water.
After eye contact:	Rinse opened eye for several minutes under running water.
After swallowing:	Do not induce vomiting; immediately call for medical help.
Information for doctor:	
Most important symptoms and effects, both acute and delayed	No further relevant information available.
Danger	Aspiration hazard
Indication of any immediate medical attention and special treatment needed	No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable
extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters
Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

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Environmental precautions:	Do not allow product to reach sewage system or any water course. Prevent seepage into sewage system, workpits and cellars. Inform respective authorities in case of seepage into water course or sewage system.
Methods and material for containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.
Reference to other sections	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling Keep receptacles tightly sealed.
Store in cool, dry place in tightly closed receptacles.

Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities**Storage:**

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

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

* 8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters**Components with limit values that require monitoring at the workplace:****287-92-3 cyclopentane**REL Long-term value: 1720 mg/m³, 600 ppmTLV Long-term value: 1720 mg/m³, 600 ppm

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls**Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not ingest.

Breathing equipment: Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

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Protection of hands:	Filter AX Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
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. Nitrile rubber, NBR > 0,38 mm
Penetration time of glove material	> 480 min (EN 374)
Eye protection:	Tightly sealed goggles

*** 9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value:	Not determined.

Change in condition

Melting point/Melting range:	-93.3 °C (-136 °F)
Boiling point/Boiling range:	49 °C (120 °F)

Flash point:	-35 °C (-31 °F)
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Flammability (solid, gaseous):	Not applicable.
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Ignition temperature:	380 °C (716 °F)
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Decomposition temperature:	Not determined.
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Auto igniting:	Not determined.
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Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
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Explosion limits:

Lower:	1.3 Vol %
Upper:	8 Vol %

Vapor pressure at 20 °C (68 °F):	346 hPa (260 mm Hg)
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Density at 15 °C (59 °F):	0.746 g/cm ³ (6.225 lbs/gal) (DIN 51 757)
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Relative density	Not determined.
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Vapor density	Not determined.
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Evaporation rate	Not determined.
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Solubility in / Miscibility with

Water at 20 °C (68 °F):	0.15 g/l
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Trade name: Cyclopentane PU**Partition coefficient (n-octanol/water):** Not determined.**Viscosity:****Dynamic:** Not determined.**Kinematic:** Not determined.**Other information** No further relevant information available.***10 Stability and reactivity****Reactivity** No further relevant information available.**Chemical stability****Thermal decomposition /****conditions to be avoided:** No decomposition if used according to specifications.**Possibility of hazardous****reactions**

No dangerous reactions known.

Conditions to avoid

No further relevant information available.

Incompatible materials:

No further relevant information available.

Hazardous decomposition**products:**

Carbon monoxide

11 Toxicological information*Information on toxicological effects****Acute toxicity:****LD/LC50 values that are relevant for classification:****287-92-3 cyclopentane**

Oral LD50 > 2000 mg/kg (rat) (OECD 401)

Inhalative LC50 /4 h > 25.3 mg/L (rat) (OECD 403)

Primary irritant effect:**on the skin:** No irritant effect.**on the eye:** No irritating effect.**Sensitization:** No sensitizing effects known.**Additional toxicological****information:**

Inhalation of concentrated vapors as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

Carcinogenic categories**IARC (International Agency for Research on Cancer)**

Substance is not listed.

NTP (National Toxicology Program)

Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information*Toxicity****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.

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Mobility in soil	No further relevant information available.
Ecotoxical effects:	
Remark:	Harmful to fish
Additional ecological information:	
General notes:	Water hazard class 1 (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Harmful to aquatic organisms
Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
Other adverse effects	No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

* 14 Transport information

UN-Number	UN1146
DOT, ADR, IMDG, IATA	
UN proper shipping name	
DOT	Cyclopentane
ADR	1146 Cyclopentane
IMDG, IATA	CYCLOPENTANE
Transport hazard class(es)	
DOT	



Class	3 Flammable liquids
Label	3

ADR


Class	3 (F1) Flammable liquids
Label	3

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IMDG, IATA


Class	3 Flammable liquids
Label	3
Packing group	
DOT, ADR, IMDG, IATA	II
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
Danger code (Kemler):	33
EMS Number:	F-E,S-D
Stowage Category	E
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

ADR

Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
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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":	UN 1146 CYCLOPENTANE, 3, II

*15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara
Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act):

Substance is listed.

Proposition 65
Chemicals known to cause cancer:

Substance is not listed.

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Trade name: Cyclopentane PU
Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Substance is not listed.

Carcinogenicity categories
EPA (Environmental Protection Agency)

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has been carried out.

* **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.

Date of preparation / last
revision

06/07/2016 / 30

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 ICAO: International Civil Aviation Organisation
 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
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety
 OSHA: Occupational Safety & Health
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 BEI: Biological Exposure Limit
 Flam. Liq. 2: Flammable liquids – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 Asp. Tox. 1: Aspiration hazard – Category 1
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* **Data compared to the previous version altered.**