

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 10.05.2017

V - 2

Revision: 10.05.2017

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

- **1.1 Product identifier**
 - **Trade name:** PU-SYSTEM H200-AT A-Komponente
 - **1.2 Relevant identified uses of the substance or mixture and uses advised against** Not determined
 - **Application of the substance / the mixture** Synthetic resin
 - **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
Vosschemie GmbH
Esinger Steinweg 50
D-25436 Uetersen
Phone: +49 (0)4122 717 0; Fax: +49 (0)4122 717158; info@vosschemie.de
 - **Further information obtainable from:**
Abteilung Labor / +49 (0)4122 717 0
s.schaller@vosschemie.de
 - **1.4 Emergency telephone number:**
Giftinformationszentrum (GIZ)-Nord, Goettingen, Deutschland
Phone: +49 (0)551 19240
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SECTION 2: Hazards identification

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



Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

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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**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
Propane-1,2-diol, propoxylated
cyclohexyldimethylamine
- **Hazard statements**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
- **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P302+P352 **IF ON SKIN:** Wash with plenty of soap and water.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **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:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 25322-69-4 NLP: 500-039-8	Propane-1,2-diol, propoxylated ⚠ Acute Tox. 4, H302	25-50%
CAS: 98-94-2 EINECS: 202-715-5 Reg.nr.: 01-2119533030-60	cyclohexyldimethylamine ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; ⚠ Acute Tox. 3, H331; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411	1.0-<3.0%
CAS: 56-81-5 EINECS: 200-289-5	glycerol substance with a Community workplace exposure limit	1.0-<3.0%

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· **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:**

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

Personal protection for the First Aider.

Take affected persons out of danger area and lay down.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Immediately remove any clothing soiled by the product.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation occurs: Get medical advice/attention.

· After eye contact:

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

If eye irritation persists: Get medical advice/attention.

· After swallowing:

Rinse mouth.

Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.**· 4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures**· 6.1 Personal precautions, protective equipment and emergency procedures**

Particular danger of slipping on leaked/spilled product.

Wear protective equipment. Keep unprotected persons away.

Avoid contact with the eyes and skin.

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- Ensure adequate ventilation
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
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 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
Avoid contact with the eyes and skin.
Ensure good ventilation/exhaustion at the workplace.
Do not inhale gases / fumes / aerosols.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidising agents.
Do not store together with acids.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
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:**

56-81-5 glycerol

WEL (Great Britain)	Long-term value: 10 mg/m ³
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· **DNELs**

98-94-2 cyclohexyldimethylamine

Inhalative	Long-term exposure - systemic effects	35 mg/m ³ (worker)
	Acute/short-term exposure - systemic effects	35 mg/m ³ (worker)

· **PNECs**

98-94-2 cyclohexyldimethylamine

PNEC aqua	0.002 mg/l (freshwater)
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	0.0002 mg/l (marine water)
	0.02 mg/l (intermittent releases)
PNEC sediment	0.0211 mg/kg (freshwater)
	0.00211 mg/kg (marine water)
PNEC STP	20.6 mg/l
PNEC soil	0.00305 mg/kg (soil dw)

· **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.

Keep away from foodstuffs, beverages and feed.

Do not eat, drink, smoke or sniff while working.

Do not inhale gases / fumes / aerosols.

Store protective clothing separately.

Immediately remove all soiled and contaminated clothing

Take off contaminated clothing.

Wash hands before breaks and at the end of work.

Use skin protection cream for skin protection.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

No special procedures required if all workplace limit values are continuously respected.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter A/P2

· **Protection of hands:**



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

Check the permeability prior to each anewed use of the glove.

Preventive skin protection by use of skin-protecting agents is recommended.

· **Material of gloves**

DIN EN 374

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.35 mm

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

Value for the permeation: Level ≤ 6 (≥ 480 min)

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **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:	Yellowish
· Odour:	Amine-like

· **pH-value:** Not determined· **Change in condition**

Initial boiling point and boiling range: Undetermined.

· **Flash point:** > 100 °C· **Auto-ignition temperature:** Product is not selfigniting.· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.· **Density at 20 °C:** 1.1 g/cm³· **Solubility in / Miscibility with water:** Partly miscible.· **Partition coefficient: n-octanol/water:** Not determined· **Viscosity:**

· Dynamic at 20 °C:	> 2000 mPas
· Kinematic:	Not determined

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No decomposition if used according to specifications.· **10.2 Chemical stability** No decomposition if used and stored according to specifications.· **10.3 Possibility of hazardous reactions**

Exothermic polymerisation.

Reacts with acids.

Reacts with oxidising agents.

· **10.4 Conditions to avoid** No further relevant information available.· **10.5 Incompatible materials:** No further relevant information available.

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- **10.6 Hazardous decomposition products:**
Formation of toxic gases is possible during heating or in case of fire.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

- **Acute toxicity**
Harmful if swallowed.

· **LD/LC50 values relevant for classification:**

Oral	ATE	1720.76 mg/kg (mix) (Calculation method)
Dermal	ATE	31104.0 mg/kg (mix) (Calculation method)
Inhalative	ATE	174.96 mg/l (mix) (Calculation method)

25322-69-4 Propane-1,2-diol, propoxylated

Oral	LD50	500 - <2000 mg/kg (rat)
Dermal	LD50	> 3000 mg/kg (rabbit)

98-94-2 cyclohexyldimethylamine

Oral	LD50	272 mg/kg (rat)
Dermal	LD50	> 400 mg/kg (rat)
Inhalative	LC50 /4h	4.5 mg/l (rat)

56-81-5 glycerol

Oral	LD 50	> 2000 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.

· **Subacute to chronic toxicity:**

25322-69-4 Propane-1,2-diol, propoxylated		
Oral	NOAEL (subacute)	≥1000 mg/kg (rat) (OECD 407)

· **Additional toxicological information:**

- This statement was deduced from the properties of the single components.
- **Sensitisation** No sensitising effects known.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Carcinogenicity** No further relevant information available.

· **Reproductive toxicity/Fertility**

25322-69-4 Propane-1,2-diol, propoxylated		
Oral	NOAEL (fertility)	1000 mg/kg (rat, parents) (OECD 421)

· **Reproductive toxicity/Teratogenicity**

25322-69-4 Propane-1,2-diol, propoxylated		
Oral	NOAEL (developmental toxicity)	1000 mg/kg (rat) (OECD 421)

- **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.

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· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

25322-69-4 Propane-1,2-diol, propoxylated

EC0/72h	≥ 100 mg/l (<i>desmodesmus subspicatus</i>) (OECD 201)
EC50/48h	> 100 mg/l (<i>daphnia</i>) (OECD 202)
EC50/3h	> 1000 mg/l (<i>activated slugde</i>) (OECD 209)
LC50/96h	> 100 mg/l (<i>poecilia reticulata</i>) (OECD 203)
LC50	> 100 mg/l (<i>danio rerio</i>) (48h)
NOEC (<i>aqua chron.</i>)	≥ 10 mg/l (<i>daphnia magna</i>) (OECD 211, 21d)

98-94-2 cyclohexyldimethylamine

EC50	75 mg/l (<i>daphnia magna</i>)
LC50/96h	>20-<46 mg/l (<i>pimephales promelas</i>)

56-81-5 glycerol

EC0	> 100 mg/l (<i>bacteria</i>)
LC50	> 100 mg/l (<i>fish</i>)

· 12.2 Persistence and degradability

25322-69-4 Propane-1,2-diol, propoxylated

Biodegradation	> 60 % (OECD 301 F)
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56-81-5 glycerol

Biodegradation	> 60 % (28d)
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· 12.3 Bioaccumulative potential

25322-69-4 Propane-1,2-diol, propoxylated

log Kow	0.3-0.9 (25 °C)
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56-81-5 glycerol

log Pow	-1.75
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· Behaviour in environmental systems:

· 12.4 Mobility in soil

25322-69-4 Propane-1,2-diol, propoxylated

log Koc	0-1
Koc	1-10

· Additional ecological information:

· **General notes:** Do not allow product to reach ground water, water course or sewage system.

· 12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

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

· **Waste disposal key:**

The waste codes given above are to be considered recommendations; because of regional and industrial sector specific features, application of different waste codes is possible.

· **European waste catalogue**

07 02 08*	other still bottoms and reaction residues
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· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, ADN, IMDG, IATA** Void

· **14.2 UN proper shipping name**

· **ADR, ADN, IMDG, IATA** Void

· **14.3 Transport hazard class(es)**

· **ADR, ADN, IMDG, IATA**

· **Class** Void

· **14.4 Packing group**

· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:**

Not applicable.

· **14.6 Special precautions for user**

Not applicable.

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**

Not dangerous according to the above specifications.

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **National regulations:**

· **Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

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· **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**

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

H411 Toxic to aquatic life with long lasting effects.

· **Classification according to Regulation (EC) No 1272/2008**

Acute Tox. 4, H302

Skin. Irrit. 2, H315

Eye Irrit. 2, H319

Classification procedure

Calculation method

Calculation method

Calculation method

· **Department issuing SDS:** Abteilung Labor

· **Contact:** Frau S. Schaller

· **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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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