

**Safety Data Sheet**

According to Regulation EC No. 1907/2006

**5 Min PU hard / Polyol (A)**

Date of issue/Date of revision: 28.01.2021

en / GB - Version 1.0

**1. Identification of the substance/preparation and of the company/undertaking****1.1 Identification of the substance** **or preparation:** 5 Min PU hard**1.2 Use of the substance/preparation:** PU based adhesive**1.3 Company/undertaking identification**

Company name: Gößl + Pfaff GmbH  
 Street: Münchener Str. 13  
 Place: 85123 Karlskron/Brautlach  
 Telephone: +49 (0) 8450 / 932-0  
 Fax.: +49 (0) 8450 / 932-13  
 Contact person: Management: Mr. Gößl, Mr. Pfaff  
 E-Mail: info@goessl-pfaff.de  
 Internet: [www.goessl-pfaff.de](http://www.goessl-pfaff.de)  
 Responsible Department: Management

**1.4 Emergency telephone****Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0) 6132-84463****2. Hazards identification****2.1. Classification of the substance or mixture**

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12.

**Hazard classification and indication:**

H319 Causes serious eye irritation.

**2.2 Label elements**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

**Signal words:** Warning**Hazard statements:**

H319 Causes serious eye irritation.

**Precautionary statements:**

P264 Wash . . . thoroughly after handling.  
 P280 Wear 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.

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage > 0,1%.

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#### 3. Composition/information on ingredients

##### 3.1. Substances

Information not relevant.

##### 3.2. Mixtures

Contains:

Identification	Conc. %.	Classification 1272/2008 (CLP).
<b>1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol</b>		
CAS. 102-60-3 EC. 203-041-4 INDEX. - Reg. no. 01-2119552434-41-0001	20-50	Eye Irrit. 2 H319
<b>Glycerylpoly(oxypropylene)triamine</b>		
CAS. 64852-22-8 EC. - INDEX. -	1-3	Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412

Note: Upper limit is not included into the range.  
The full wording of hazard (H) phrases is given in section 16.

#### 4. First aid measures

##### 4.1. Description of first aid measures

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SKIN:** Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

**INHALATION:** Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

**INGESTION:** Get medical advice/attention. Induce vomiting only if indicated by the doctor.

Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

#### 5. Fire-fighting measures

##### 5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

##### 5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air.

Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

##### 5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system.

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Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container.

Evaluate the compatibility of the container to be used, by checking section 10.

Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7.

Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## 7. Handling and storage

### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet.

Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

Avoid the accumulation of electrostatic charges.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers.

Keep containers away from any incompatible materials, see section 10 for details.

Store the hermetically sealed containers in a dry and cool place. Low temperatures or ice do not damage the product.

Protect from temperature higher than 70 °C. The properties of the product change irreversibly exceeding the limit temperature.

### 7.3. Specific end use(s)

Information not available.

## 8. Exposure controls/personal protection

### 8.1 Control parameters

#### 1,1',1'',1'''-Ethylenedinitrilotetrapropan-2-ol

Predicted no-effect concentration - PNEC.

Normal value in fresh water	0,085	mg/l
Normal value in marine water	0,0085	mg/l
Normal value for fresh water sediment	0,193	mg/kg
Normal value for marine water sediment	0,0193	mg/kg
Normal value for water, intermittent release	1,51	mg/l

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Normal value of STP microorganisms	70	mg/l						
Normal value for the terrestrial compartment	0,0183	mg/kg						
<b>Health - Derived no-effect level - DNEL / DMEL</b>								
Route of exposure	Effects on consumers. Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	2,5 mg/kg/d				
Inhalation.			VND	8,7 mg/m3			VND	29,4 mg/m3
Skin.			VND	2,5 mg/kg/d			VND	4,2 mg/kg/d

Legend:

VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified.

#### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

#### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

Hand protection

Material: Nitrile rubber

Break through time: > 20 min

Glove thickness: 0.5 mm

Material: PVC

Break through time: > 20 min

Glove thickness: 0.5 mm

Remarks: Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

Wash hands before breaks and at the end of workday.

#### SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	black
Odour	Not available.

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Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	Not available.
Initial boiling point.	>200 °C.
Boiling range.	Not available.
Flash point.	182 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	0,1 Pa
Vapour density	Not available.
Relative density.	1,980 kg/l
Solubility	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	3.500 mPa·s
Explosive properties	Not available.
Oxidising properties	Not available.

#### 9.2 Other information

VOC (Directive 2010/75/EC):	0
VOC (volatile carbon)	0

## 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

### 10.5. Incompatible materials

Materials to avoid: strong acids, strong oxidants, reactive chemicals, strong bases

### 10.6. Hazardous decomposition products

Information not available.

## 11. Toxicological information

### 11.1. Information on toxicological effects

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation.

Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

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Glycerylpoly(oxypropylene)triamine

LD50 (Oral). 2,690 mg/kg

LD50 (Dermal). 12,500 mg/kg

#### 12. Ecological information

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

##### 12.1 Toxicity

Glycerylpoly(oxypropylene)triamine

LC50-for fish 68 mg/l/96h

##### 12.2. Persistence and degradability

Information not available.

##### 12.3. Bioaccumulative potential

Information not available

##### 12.4. Mobility in soil

Information not available.

##### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage >0,1 %.

#### 13. Disposal considerations

##### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste.

The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

##### CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

#### 14. Transport information

##### 14.1. UN number.

Not applicable.

##### 14.2. UN proper shipping name.

Not applicable.

##### 14.3. Transport hazard class(es).

Not applicable.

##### 14.4. Packing group.

Not applicable.

##### 14.5. Environmental hazards.

Not applicable.

##### 14.6. Special precautions for user.

Not applicable.

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**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.**

Information not relevant.

**15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**Seveso category None.Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.Product

Point 3

Contained substance.Point 20 Dibutylbis(dodecylthio)stannane  
Reg.no.: 01-2119841260-50-0000Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

**15.2. Chemical safety assessment**

No chemical safety assessment has been processed for the mixture and the substances it contains.

**16. Other information**

Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.

## LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule

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- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - ECHA website

The information of this MSDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this MSDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.