

**Safety Data Sheet**

According to Regulation EC No. 1907/2006

**GP 11 B / Hardener**

Date of issue/Date of revision: 08.04.2020

en / GB - Version 1.1

**1. Identification of the substance/preparation and of the company/undertaking****1.1 Identification of the substance or preparation:**

GP 11 B / Hardener

**1.2 Use of the substance/preparation:**

Epoxy curing agent

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

Skin Corr. 1A H314 Causes severe skin burns and eye damage.  
 Eye Dam. 1 H318 Causes serious eye damage.  
 Skin Sens. 1 H317 May cause an allergic skin reaction.  
 Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

**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**

GHS05 GHS07 GHS09

**Signal word** Danger**Hazard-determining components of labelling:**

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine  
 N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine  
 3,6-diazaoctanethylenediamin

**Hazard statements**

H314 Causes severe skin burns and eye damage.  
 H317 May cause an allergic skin reaction.  
 H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER/doctor.  
 P391 Collect spillage.

#### 2.3 Other hazards

**Results of PBT and vPvB assessment** Not applicable.

### 3. Composition/information on ingredients

#### 3.2 Chemical characterisation: Mixtures

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

Dangerous components:		
CAS: 68082-29-1 NLP: 500-191-5 Reg.nr.: 01-2119972320-44	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1A, H317	50–100 %
CAS: 10563-29-8 EINECS: 234-148-4 Reg.nr.: 01-2119970376-29	N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317	2.5-10%
CAS: 112-24-3 EINECS: 203-950-6 Reg.nr.: 01-2119487919-13	3,6-diazaoctanethylenediamin Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	2.5-10%

### 4. First aid measures

#### 4.1 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.

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 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.

#### 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.

### 5. Fire-fighting 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

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

In case of fire, the following can be released:

Nitrogen oxides (NO<sub>x</sub>)  
Carbon monoxide (CO)

#### 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.

### 6. Accidental release measures

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

Wear protective equipment.  
Keep unprotected persons away.

#### 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.  
Ensure adequate ventilation.

#### 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.

### 7. Handling and storage

#### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.

##### Information about fire - and explosion protection:

Protect from heat.

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

##### Storage:

##### Requirements to be met by storerooms and receptacles:

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.

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

### 8. Exposure controls/personal protection

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

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#### 8.1 Control parameters

##### Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**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.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

##### Respiratory protection:

Not necessary if room is well-ventilated.

##### Protection of hands:



Protective gloves

##### Material of gloves

Nitrile rubber, NBR

Butyl rubber, BR

Neoprene 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. 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

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

##### Eye protection:



Safety glasses

Tightly sealed goggles

**Body protection:** Protective work clothing

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

##### Appearance:

Form:	Viscous
Colour:	Amber coloured
Odour:	Amine-like
ph-value at 20 °C:	>10
Change in condition	
Melting point/Melting range:	NA °C
Initial boiling point/boiling range:	235 °C (DIN 53171)
Flash point:	>100 °C (ISO 2719)
Ignition temperature:	>300 °C (DIN 51 794)
Decomposition temperature:	>260 °C (DIN 53171)
Auto-ignition temperature:	Product is not selfigniting.

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Explosive properties:	Product does not present an explosion hazard.
Density at 20 °C:	0,96 g/cm <sup>3</sup> (ISO 1675:1985)
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
organic solvents:	Soluble in many organic solvents.

**9.2 Other information**

No further relevant information available.

#### 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.

**10.3 Possibility of hazardous reactions**

Strong exothermic reaction with acids.

**10.4 Conditions to avoid**

No further relevant information available.

**10.5 Incompatible materials:**

No further relevant information available.

**10.6 Hazardous decomposition products:**

Corrosive gases/vapours

Ammonia

#### 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:****10563-29-8 N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine**

Oral	LD50	1,669 mg/kg (rat)
Dermal	LD50	1,310 mg/kg (rat)

**Primary irritant effect:****Skin corrosion/irritation**

Causes severe skin burns and eye damage.

**Serious eye damage/irritation**

Causes serious eye damage.

**Respiratory or skin sensitisation**

May cause an allergic skin reaction.

**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**

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.

### 12. Ecological information

#### 12.1 Toxicity

**Aquatic toxicity:** No further relevant information available.

#### 12.2 Persistence and degradability

No further relevant information available.

#### Other information:

The product is not easily biodegradable.

#### 12.3 Bioaccumulative potential

No further relevant information available.

#### 12.4 Mobility in soil

No further relevant information available.

#### Additional ecological information:

##### General notes:

At present there are no ecotoxicological assessments.

#### 12.5 Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

#### 12.6 Other adverse effects

No further relevant information available.

### 13. Disposal considerations

#### 13.1 Waste treatment methods

##### Recommendation

Dispose of the product by burning in a suitable incinerator or bury in an approved landfill following all applicable local and/or national regulations.

European waste catalogue	
20 01 27	paint, inks, adhesives and resins containing dangerous substances

##### Uncleaned packaging:

##### Recommendation:

Empty containers may not be disposed of unless any remaining material adhering to the internal walls has been removed.

Disposal must be made according to official regulations.

**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14. Transport information

#### 14.1 UN-Number

ADR, IMDG, IATA

UN1760

#### 14.2 UN proper shipping name

ADR

1760 CORROSIVE LIQUID, N.O.S. (N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, TRIETHYLENETETRAMINE), ENVIRONMENTALLY HAZARDOUS

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**IMDG**

CORROSIVE LIQUID, N.O.S. (N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, TRIETHYLENETETRAMINE), MARINE POLLUTANT

**IATA**

CORROSIVE LIQUID, N.O.S. (N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, TRIETHYLENETETRAMINE)

**14.3 Transport hazard class(es)****ADR, IMDG****Class Label**8 Corrosive substances  
8**IATA****Class Label**8 Corrosive substances  
8**14.4 Packing group****ADR, IMDG, IATA**

II

**14.5 Environmental hazards:**Product contains environmentally hazardous substances:  
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine  
Yes**Marine pollutant:**

Symbol (fish and tree)

**Special Marking (ADR):**

Symbol (fish and tree)

**14.6 Special precautions for user**

Warning: Corrosive substances

**Danger code (Kemler):**

80

**EMS-Number:**

F-A, S-B

**Segregation groups:**

Alkalis

**Stowage Category:**

B

**Stowage Code:**

SW2 Clear of living quarters.

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

Not applicable

**Transport/Additional information:****ADR****Limited quantities (LQ):**

1 L

**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):**

1 L

**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 1760 CORROSIVE LIQUID, N.O.S. (N'-(3-AMINO-PROPYL)-N,N-DIMETHYLPROPANE-1,3-DIAMINE, TRIETHYLENETETRAMINE), 8, II, ENVIRONMENTALLY HAZARDOUS



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**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.**Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3**National regulations:****Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16. Other information****Relevant phrases**

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

**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

Acute Tox. 4: Acute toxicity – Category 4

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

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

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

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

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

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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 SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.