Safety Data Sheet

According to Regulation EC No. 1907/2006

GP 9323 / Hardener

Date of issue/Date of revision: 27.04.2016 Version 15

1. Identification of the substance/preparation and of the company/undertaking

1.1 Identification of the substance

or preparation: GP 9323 / Hardener

1.2 Use of the substance/preparation: Structural 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-No.:
 +49 (0) 8450 / 932-13

Contact person: Management: Mr. Gößl, Mr. Pfaff

E-Mail: info@goessl-pfaff.de Internet: www.goessl-pfaff.de

Responsible Department: Management

1.4 Emergency telephone +49 (0) 8450 / 932-0

Opening times

Monday till Thursday: 8.00 - 17.00 o'clock Friday: 8.00 - 15.00 o'clock

2. Hazards identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008 CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318 Skin Corrosion/Irritation, Category 1B - Skin Corr. 1B; H314

Skin Sensitization, Category 1 - Skin Sens. 1; H317

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols:

GHS05 (Corrosion) GHS07 (Exclamation mark)

Pictograms



Ingredients:

Ingredient CAS Nbr % by Wt 3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9 60 - 100

HAZARD STATEMENTS:

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS

Prevention:

P260B Do not breathe dust.

P280D Wear protective gloves, protective clothing, and eye/face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

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 CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

<=125 ml Hazard statements

H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.

<=125 ml Precautionary statements

Prevention:

P260B Do not breathe dust.

P280D Wear protective gloves, protective clothing, and eye/face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

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 CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Contains 2% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

May cause chemical gastrointestinal burns.

3. Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	224-207-2	60 - 100	Skin Sens. 1, H317 (Vendor) Skin Corr. 1B, H314 (Self Classified)
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	202-013-9	7 - 13	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 (CLP)
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5		5 - 10	
Bis[(dimethylamino)methyl]phenol	71074-89-0	275-162-0	1 - 5	Acute Tox. 4, H302; Skin Corr. 1B, H314 (Self Classified)

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

4. First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

Eye contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If swallowed

Rinse mouth. Do not induce vomiting. Get immediate medical attention.



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

See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

5. Fire-fighting measures

5.1. Extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u> <u>Condition</u>

Carbon monoxide. During combustion. Carbon dioxide During combustion.

5.3. Advice for fire-fighters

No special protective actions for fire-fighters are anticipated.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Sweep up. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

7. Handling and storage

7.1. Precautions for safe handling

Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store away from heat. Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.



Ingredient CAS Nbr Agency Limit type Additional comments

Silicon dioxide 112945-52-5 UK HSC TWA(as inhalable dust):6

mg/m3;TWA(as respirable dust):2.4 mg/m3

UK HSC: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment.

The following eye/face protection(s) are recommended:

Full face shield.

Indirect vented goggles.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended:

MaterialThickness (mm)Breakthrough TimeFluoroelastomerNo data availableNo data availableNitrile rubber.No data availableNo data available

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Nitrile

Respiratory protection

Wear respiratory protection if ventilation is inadequate to prevent overexposure. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure: Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid.
Specific Physical Form: Paste

Appearance/Odour Red thick paste. Amine odour

Odour thresholdNo data available.pHNot applicable.Boiling point/boiling range>=100 °CMelting pointNot applicable.Flammability (colid gas)Not alessified

Flammability (solid, gas)

Explosive properties

Not classified
Not classified



Oxidising properties Not classified

Flash point >=100 °C [Test Method:Closed Cup]

Autoignition temperatureNo data available.Flammable Limits(LEL)No data available.Flammable Limits(UEL)No data available.Vapour pressureNo data available.

Relative density 1.04 - 1.08 [Ref Std:WATER=1]

Water solubility Negligible Solubility- non-water No data available. Partition coefficient: n-octanol/water No data available. No data available. **Evaporation rate** No data available. Vapour density **Decomposition temperature** No data available. 10 - 25 Pa-s [@ 23 °C] Viscosity 1.04 - 1.08 g/ml **Density**

9.2. Other information

Percent volatile 0 % weight

10. Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Avoid curing large quantities of material to prevent a premature reaction (exotherm) with production of intense heat and smoke.

Heat.

Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products Substance Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

11. Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin contact

May be harmful in contact with skin. Corrosive (skin burns): Signs/symptoms may include localised redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Eye contact

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.



Ingestion

May be harmful if swallowed. Gastrointestinal corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and

diarrhea; blood in the faeces and/or vomitus may also be seen.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE2,000 - 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Dermal	Rabbit	LD50 2,500 mg/kg
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Ingestion	Rat	LD50 3,160 mg/kg
2,4,6-Tris(dimethylaminomethyl)phenol	Dermal	Rat	LD50 1,280 mg/kg
2,4,6-Tris(dimethylaminomethyl)phenol	Ingestion	Rat	LD50 1,000 mg/kg
Synthetic amorphous silica, fumed, crystalline-free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline-free	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Rat	LD50 > 5,110 mg/kg
Bis[(dimethylamino)methyl]phenol	Ingestion		LD50 estimated to be 300 - 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Rabbit	Corrosive
2,4,6-Tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
Synthetic amorphous silica, fumed, crystalline-free	Rabbit	No significant irritation
Bis[(dimethylamino)methyl]phenol	similar compoun	Corrosive
	ds	

Serious Eye Damage/Irritation

Name	Species	Value
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	similar health hazards	Corrosive
2,4,6-Tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
Synthetic amorphous silica, fumed, crystalline-free Bis[(dimethylamino)methyl]phenol	Rabbit similar compoun ds	No significant irritation Corrosive

Skin Sensitisation

Name	Species	Value
2,4,6-Tris(dimethylaminomethyl)phenol	Guinea	Some positive data exist, but the data are not
	pig	sufficient for classification
Synthetic amorphous silica, fumed, crystalline-free	Human	Not sensitising
	and	
	animal	

Respiratory Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
2,4,6-Tris(dimethylaminomethyl)phenol	In Vitro	Not mutagenic
Synthetic amorphous silica, fumed, crystalline-free	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Synthetic amorphous silica, fumed, crystalline-free	Not	Mouse	Some positive data exist, but the data are not
	specified.		sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
3,3'- Oxybis(ethyleneoxy)bis(pr opylamine)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
2,4,6- Tris(dimethylaminomethyl) phenol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2,4,6- Tris(dimethylaminomethyl))phenol	Dermal	skin liver nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 125 mg/kg/day	28 days
2,4,6- Tris(dimethylaminomethyl))phenol	Dermal	auditory system hematopoietic system eyes	All data are negative	Rat	NOAEL 125 mg/kg/day	28 days
Synthetic amorphous silica, fumed, crystalline-free	Inhalation	respiratory system silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

For the component/components, either no data is currently available or the data is not sufficient for classification.

12. Ecological information

12.1 Toxicity

No product test data available.



Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
3,3'- Oxybis(ethylen eoxy)bis(propy lamine)	4246-51-9	Golden Orfe	Experimental	96 hours	LC50	220 mg/l
3,3'- Oxybis(ethylen eoxy)bis(propy lamine)	4246-51-9	Algae	Experimental	72 hours	EC50	69 mg/l
3,3'- Oxybis(ethylen eoxy)bis(propy lamine)	4246-51-9	Crustacea	Experimental	48 hours	EC50	220 mg/l
2,4,6- Tris(dimethyla minomethyl)ph enol	90-72-2	Grass Shrimp	Laboratory	96 hours	LC50	718 mg/l
2,4,6- Tris(dimethyla minomethyl)ph enol	90-72-2	Common Carp	Laboratory	96 hours	LC50	175 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Zebra Fish	Analogous Compound	96 hours	LC50	5,000 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Green algae	Analogous Compound	72 hours	EC50	440 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Water flea	Analogous Compound	48 hours	EC50	7,600 mg/l
Bis[(dimethyla	71074-89-0		Data not			
mino)methyl]p henol			available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
2,4,6-	90-72-2	Calculated		Photolytic half-	1.53 hours (t	Other methods
Tris(dimethyla		Photolysis		life (in air)	1/2)	
minomethyl)ph						
enol						
Bis[(dimethyla	71074-89-0	Data not	N/A	N/A	N/A	N/A
mino)methyl]p		available or				
henol		insufficient for				
		classification				
Synthetic	112945-52-5	Data not	N/A	N/A	N/A	N/A
amorphous		available or				
silica, fumed,		insufficient for				
crystalline-free		classification				

2,4,6- Tris(dimethyla minomethyl)ph enol	Laboratory Biodegradation	28 days	BOD	0	OECD 301D - Closed bottle test
3,3'- Oxybis(ethylen eoxy)bis(propy lamine)	Estimated Biodegradation	28 days	BOD	•	OECD 301C - MITI test (I)

12.3: Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Bis[(dimethyla	71074-89-0	Data not	N/A	N/A	N/A	N/A
mino)methyl]p		available or				
henol		insufficient for				
		classification				
Synthetic	112945-52-5	Data not	N/A	N/A	N/A	N/A
amorphous		available or				
silica, fumed,		insufficient for				
crystalline-free		classification				
3,3'-	4246-51-9	Estimated		Log Kow	-1.46	Other methods
Oxybis(ethylen		Bioconcentrati				
eoxy)bis(propy		on				
lamine)						
2,4,6-	90-72-2	Laboratory		Log Kow	-0.66	Other methods
Tris(dimethyla		Bioconcentrati				
minomethyl)ph		on				
enol						

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

13. Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Dispose of completely cured (or polymerised) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product that has been completely cured or polymerised may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances
20 01 27* Paint, inks, adhesives and resins containing dangerous substances



14. Transport information

ADR: UN3259; Amines, Solid, Corrosive, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine)); 8; II; (E); C8.

IATA: UN3259; Amines, Solid, Corrosive, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine)); 8; II.

IMDG: UN3259; Amines, Solid, Corrosive, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine)); 8; II; FA, SB.

15. Regulatory information

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

15.2. Chemical Safety Assessment

Not applicable

16. Other information

List of relevant H statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

DISCLAIMER:

The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.