

Safety Data Sheet

according to Regulation (EC) No 1907/2006

GI 112 B

Revision date: 15.08.2018

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Pictograms:



Hazard statements

- H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H332 Harmful if inhaled.
 H412 Harmful 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.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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 CENTER/doctor.

Special labelling of certain mixtures

Restricted to professional users.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

formulated polyamine hardener

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
38294-64-3	4,4'-Isopropylidenediphenol, oligomeric reaction products with l-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine			45 - < 50 %
	500-101-4		01-2119965165-33	
	Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 3; H314 H318 H317 H412			
100-51-6	benzyl alcohol			40 - < 45 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319			
2579-20-6	1,3-Cyclohexanedimethanamine			10 - < 15 %
	219-941-5		01-2119543741-41	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A, Aquatic Chronic 3; H312 H302 H314 H412			

Full text of H and EUH statements: see section 16.

Further Information

No information available.

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. Carbon dioxide (CO₂). Foam. Extinguishing powder.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Wear personal protection equipment (refer to section 8). Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations.

Hints on joint storage

For more information about together and separate storage: refer to TRGS 510

Further information on storage conditions

Recommended storage temperature: 5 - 30 °C

Keep/Store only in original container.

Store in a dry place.

7.3. Specific end use(s)

Further remarks:

Information System of the Professional Association of construction industry see on www.gisbau.de**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
38294-64-3	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine			
	Worker DNEL, long-term	inhalation	systemic	0,493 mg/m ³
	Worker DNEL, long-term	dermal	systemic	0,14 mg/kg bw/day
100-51-6	benzyl alcohol			
	Worker DNEL, long-term	inhalation	systemic	22 mg/m ³
	Worker DNEL, acute	inhalation	systemic	110 mg/m ³
	Worker DNEL, long-term	dermal	systemic	8 mg/kg bw/day
	Worker DNEL, acute	dermal	systemic	40 mg/kg bw/day
2579-20-6	1,3-Cyclohexanedimethanamine			
	Worker DNEL, long-term	inhalation	local	0,00947 mg/m ³

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PNEC values

CAS No	Substance	Value
Environmental compartment		
38294-64-3	4,4'-Isopropylidenediphenol, oligomeric reaction products with l-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	
Freshwater		0,011 mg/l
Marine water		0,001 mg/l
100-51-6	benzyl alcohol	
Freshwater		1 mg/l
Marine water		0,1 mg/l
Freshwater sediment		5,27 mg/kg
Marine sediment		0,527 mg/kg
Soil		0,456 mg/kg
2579-20-6	1,3-Cyclohexanedimethanamine	
Freshwater		0,033 mg/l
Marine water		0,003 mg/l

8.2. Exposure controls

Appropriate engineering controls

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Recommendation to EN 374: For short time use or protection against splashes: Butyl rubber / nitrile rubber (0.4 mm), contaminated gloves should be changed and disposed. Suitable for permanent exposure: Viton gloves (0.4 mm) Break through time > 30 min.

Skin protection

Wear suitable protective clothing. Recommendation: Safety shoes according to EN ISO 20345, long pants and long-sleeved work shirt; with mixing and stirring work additional rubber apron and protective boots according to EN 14605

Respiratory protection

To follow: EN 689 - Methods for determining inhalation exposure In case of inadequate ventilation wear respiratory protection. Organic vapor filter (Type A) The selection of respirators (EN 14387) must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits (sections 8.1) of the selected respirator.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
 Colour: transparent
 Odour: slightly.

Test method

pH-Value: No information available.

Flash point: 94 °C calculated.

Explosive properties

No information available.

Ignition temperature: No information available.

Decomposition temperature: No information available.

Oxidizing properties

No information available.

Vapour pressure: No information available.

Density (at 23 °C): ca. 1,03 g/cm³ ISO 2811-2

Water solubility: No information available.

Solubility in other solvents

No information available.

Partition coefficient: No information available.

Viscosity / dynamic:
 (at 25 °C) 120 - 180 mPa·s ISO 2884-1

Vapour density: No information available.

Evaporation rate: No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

Acid, Oxidising agent

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if inhaled.

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ATEmix calculated

ATE (inhalation aerosol) 3,659 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
100-51-6	benzyl alcohol					
	oral	LD50 mg/kg	1570	Rat	ECHA Dossier	
	inhalation vapour	ATE	11 mg/l			
	inhalation aerosol	ATE	1,5 mg/l			
2579-20-6	1,3-Cyclohexanedimethanamine					
	oral	LD50 mg/kg	>300- 2000	Rat (OECD 401)	ECHA Dossier	
	dermal	ATE mg/kg	1100			

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

May cause an allergic skin reaction. (4,4'-Isopropylidenediphenol, oligomeric reaction products with l-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine)

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information**12.1. Toxicity**

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2579-20-6	1,3-Cyclohexanedimethanamine					
	Acute fish toxicity	LC50	130 mg/l	96 h	Leuciscus idus OECD 203)	ECHA Dossier
	Acute algae toxicity	ErC50 mg/l	29,7	72 h	Pseudokirchnerella subcapitata (OECD 201)	ECHA Dossier
	Acute crustacea toxicity	EC50 mg/l	33,1	48 h	Daphnia magna (OECD 202)	ECHA Dossier

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
38294-64-3	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	0%	28	ECHA Dossier
	Not readily biodegradable (according to OECD criteria)				
100-51-6	benzyl alcohol	OECD 301D/ EEC 92/69/V, C.4-E	95%	28	ECHA Dossier
	Readily biodegradable (according to OECD criteria).				
2579-20-6	1,3-Cyclohexanedimethanamine	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	29%	28	ECHA Dossier
	Not readily biodegradable (according to OECD criteria)				

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
38294-64-3	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	3,6
100-51-6	benzyl alcohol	1,1
2579-20-6	1,3-Cyclohexanedimethanamine	0,783

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

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Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 2735
14.2. UN proper shipping name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Classification code:	C7
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

Marine transport (IMDG)

14.1. UN number:	UN 2735
14.2. UN proper shipping name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Marine pollutant:	No
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-A, S-B

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

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

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

2004/42/EC (VOC):	VOC content (g/L), delivery state: < 500
Subcategory according to Directive 2004/42/EC:	Two-pack reactive performance coatings for specific end use such as floors - Solvent-borne coatings, VOC limit value: 500 g/l
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

Additional information

Prohibition/Restriction:

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REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): 3

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). None of the components are listed (=> 0.1 %).

REACH - List of substances subject to authorisation (Annex XIV): not applicable

REACH Information: All substances contained in our Products are preregistered or registered by our upstream suppliers, and/or preregistered or registered by us, and/or excluded from the regulation, and/or exempted from the registration.

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water contaminating class (D):	2 - clearly water contaminating
Skin resorption/Sensitization:	Permeates easily through outer skin and causes poisoning. Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
 benzyl alcohol
 1,3-Cyclohexanedimethanamine

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 3,9,14.

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 Harmonized 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
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 4; H332	Calculation method
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.
 H312 Harmful in contact with skin.

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H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)