SAFETY DATA SHEE



Epoxy Repair NG Comp B

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

1.1 Product identifier

Product name : Epoxy Repair NG Comp B

Product code : 33103

Product description : Hardener. Putty.

Product type : Solid.

Other means of : Not available.

identification

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use in coatings - Consumer use: Apply this product only as specified on the label.

Use in coatings - Professional use

1.3 Details of the supplier of the safety data sheet

Jotun Ibérica S.A. Poligon Industrial Santa Rita Calle Estàtica, no 3

08755 - Castellbisbal Barcelona

Tel: +34 93 771 18 00 Fax: +34 93 771 18 01 SDSJotun@jotun.com

1.4 Emergency telephone number

Jotun Paints Europe Ltd., Spain: Tel. +34 93 77 11 800

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Irrit, 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms





Signal word : Danger.

Date of issue/Date of revision 1/16 : 05.06.2019 Date of previous issue Version: 1 : No previous validation

SECTION 2: Hazards identification

Hazard statements : H318 - Causes serious eye damage.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

General: P102 - Keep out of reach of children.

Prevention: P280 - Wear protective gloves. Wear eye or face protection.

P273 - Avoid release to the environment.

Response: P333 + P313 - If skin irritation or rash occurs: Get medical attention.

P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or physician.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

Hazardous ingredients : Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

and triethylenetetramine

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids,

tetraethylenepentamine and triethylenetetramine

formaldehyde, polymer with benzenamine, hydrogenated Amines, polyethylenepoly-, triethylenetetramine fraction

polyethlyenepolyamines

3-aminopropyldimethylamine; N,N-dimethyl-1,3-diaminopropane

4,4'-methylenebis(cyclohexylamine)

Supplemental label

elements

articles

: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	Weight %	Regulation (EC) No. 1272/2008 [CLP]	Туре
talc (non-asbestos form)	EC: 238-877-9 CAS: 14807-96-6	≥10 - ≤25	Not classified.	[2]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]
fatty acids, c18-unsatd., dimers, polymers with tall-oil fatty acids and triethylenetetramine	EC: 500-191-5 CAS: 68082-29-1	≤10	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 2/16

SECTION 3: Composition/information on ingredients

	T = -	<u> </u>	1	1
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with	EC: 500-187-3 CAS: 68071-65-8	≤10	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
tall-oil fatty acids,	CAS. 0807 1-03-0		Skin Sens. 1, H317	
tetraethylenepentamine and			GRAIT GETIG. 1, 11017	
triethylenetetramine				
Amides, from tall-oil fatty acids	EC: 268-945-3	≤5	Eye Irrit. 2, H319	[1]
and tetraethylenepentamine	CAS: 68155-17-9			
formaldehyde, polymer with	EC: 603-894-6	≤1.9	Acute Tox. 4, H302	[1]
benzenamine, hydrogenated	CAS: 135108-88-2		Skin Corr. 1C, H314	
			Eye Dam. 1, H318	
			Skin Sens. 1, H317 STOT RE 2, H373 (kidneys)	
			(oral)	
			Aquatic Chronic 3, H412	
2,4,6-tris(dimethylaminomethyl)	REACH #:	≤1.6	Skin Corr. 1C, H314	[1]
phenol	01-2119560597-27		Eye Dam. 1, H318	
·	EC: 202-013-9			
	CAS: 90-72-2			
	Index: 603-069-00-0			
Amines, polyethylenepoly-,	REACH #:	≤1.4	Acute Tox. 4, H302	[1]
triethylenetetramine fraction	01-2119487919-13 EC: 292-588-2		Acute Tox. 4, H312 Skin Corr. 1B, H314	
	CAS: 90640-67-8		Eye Dam. 1, H318	
	OAG: 30040-07-0		Skin Sens. 1, H317	
			Aquatic Chronic 3, H412	
Amines, polyethylenepoly-,	EC: 292-587-7	<1	Acute Tox. 4, H302	[1]
tetraethylenepentamine fraction	CAS: 90640-66-7		Acute Tox. 4, H312	
			Skin Corr. 1B, H314	
			Eye Dam. 1, H318	
			Skin Sens. 1, H317	
3-aminopropyldimethylamine	REACH #:	<1	Aquatic Chronic 2, H411 Flam. Lig. 3, H226	[1]
	01-2119486842-27	`'	Acute Tox. 4, H302	[,1
	EC: 203-680-9		Skin Corr. 1B, H314	
	CAS: 109-55-7		Eye Dam. 1, H318	
	Index: 612-061-00-6		Skin Sens. 1, H317	
cyclohexanamine, 4,4'-	REACH #:	≤0.3	Acute Tox. 4, H302	[1]
methylenebis-	01-2119541673-38		Skin Corr. 1B, H314	
	EC: 217-168-8		Eye Dam. 1, H318	
	CAS: 1761-71-3		Skin Sens. 1B, H317	
			STOT RE 2, H373 (liver)	
			See Section 16 for the full	
			text of the H statements declared above.	
			deciared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 3/16

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all ca

: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery

position and seek medical advice.

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with running

water for at least 15 minutes, keeping eyelids open. Seek immediate medical

attention.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the container or label.

Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it

is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine, formaldehyde, polymer with benzenamine, hydrogenated, Amines, polyethylenepoly-, triethylenetetramine fraction, polyethylenepolyamines, 3-aminopropyldimethylamine; N,N-dimethyl-1,3-diaminopropane, 4,4'-methylenebis(cyclohexylamine). May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

See toxicological information (Section 11)

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 4/16

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous combustion products

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters : Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Date of issue/Date of revision 5/16 : 05.06.2019 Version:1 Date of previous issue : No previous validation

SECTION 7: Handling and storage

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Talc	National institute of occupational safety and health (Spain, 2/2018).
	TWA: 0.1 f/cc 8 hours. Form:

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Exposure	Value	Population	Effects
benzyl alcohol	Short term Inhalation	450 mg/m ³	Workers	Systemic
	Long term Inhalation	90 mg/m³	Workers	Systemic
	Short term Dermal	47 mg/kg bw/day	Workers	Systemic
	Long term Dermal	9.5 mg/kg bw/day	Workers	Systemic
	Short term Dermal	28.5 mg/ kg bw/day	Consumers	Systemic

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 6/16

SECTION 8: Exposure controls/personal protection

	Short term Oral	25 mg/kg bw/day	Consumers	Systemic
	Long term Dermal	5.7 mg/kg bw/day	Consumers	Systemic
	Long term Oral	5 mg/kg bw/day	Consumers	Systemic
	Long term Inhalation	8.11 mg/m ³	Consumers	Systemic
	Short term Inhalation	40.55 mg/ m³	Consumers	Systemic
2,4,6-tris(dimethylaminomethyl)phenol	Long term Dermal	0.2 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	0.31 mg/m ³	Workers	Systemic
Amines, polyethylenepoly-, triethylenetetramine fraction	Short term Inhalation	5380 mg/ m³	Workers	Systemic
	Long term Dermal	0.57 mg/ kg bw/day	Workers	Systemic
	Long term Inhalation	1 mg/m³	Workers	Systemic
	Long term Dermal	0.028 mg/ m³	Workers	Local
	Short term Dermal	8 mg/kg bw/day	Consumers	Systemic
	Short term Inhalation	1600 mg/ m³	Consumers	Systemic
	Short term Oral	20 mg/kg bw/day	Consumers	Systemic
	Short term Dermal	1 mg/cm ²	Consumers	Local
	Short term Dermal	0.25 mg/ kg bw/day	Consumers	Local
	Long term Inhalation	0.29 mg/m ³	Consumers	Systemic
	Long term Oral	0.41 mg/ kg bw/day	Consumers	Systemic
	Long term Dermal	0.43 mg/ cm ²	Consumers	Local
4,4'-methylenebis(cyclohexylamine)	Short term Dermal	0.63 mg/ kg bw/day	Workers	Systemic
	Short term Inhalation	1.5 mg/m³	Workers	Systemic
	Long term Dermal	0.21 mg/ kg bw/day	Workers	Systemic
	Long term Inhalation	0.5 mg/m³	Workers	Systemic
	Long term Dermal	kg bw/day		-
	Long term Oral	0.125 mg/ kg bw/day	Consumers	Systemic
	Inhalation Long term Dermal	0.125 mg/ kg bw/day 0.125 mg/	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
benzyl alcohol	Fresh water	1 mg/l	-
•	Marine	0.1 mg/l	_
	Sewage Treatment	39 mg/l	-
	Fresh water sediment	5.27 mg/kg dwt	-
	Marine water sediment	0.527 mg/kg dwt	-
	Soil	0.456 mg/kg dwt	-
2,4,6-tris(dimethylaminomethyl)phenol	Fresh water	0.084 mg/l	-
	Marine	0.0084 mg/l	-
	Sewage Treatment	0.2 mg/l	-

Date of issue/Date of revision: 05.06.2019Date of previous issue: No previous validationVersion: 1

SECTION 8: Exposure controls/personal protection

	Plant		
Amines, polyethylenepoly-,	Fresh water	190 µg/l	Assessment Factors
triethylenetetramine fraction			
	Fresh water sediment	95.9 mg/kg	Equilibrium Partitioning
	Marine water	38 μg/l	Assessment Factors
	Marine water sediment	19.2 mg/kg	Equilibrium Partitioning
	Soil	19.1 mg/kg	Equilibrium Partitioning
	Sewage Treatment	4.25 mg/l	Assessment Factors
	Plant		
	Secondary Poisoning	0.18 mg/kg	Assessment Factors
4,4'-methylenebis(cyclohexylamine)		0.008 mg/l	-
	Marine	0.0008 mg/l	-
	Sewage Treatment	80 mg/l	-
	Plant		
		0.39 mg/kg dwt	-
		0.039 mg/kg dwt	-
	Soil	0.072 mg/kg dwt	-

8.2 Exposure controls

Appropriate engineering controls

: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection Gloves

: Use safety eyewear designed to protect against splash of liquids.

: There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Wear suitable gloves tested to EN374.

May be used, gloves(breakthrough time) 4 - 8 hours: polyvinyl alcohol (PVA), PVC, nitrile rubber

Recommended, gloves(breakthrough time) > 8 hours: Viton®, 4H, neoprene, butyl rubber

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Body protection

: Personnel should wear antistatic clothing made of natural fibres or of hightemperature-resistant synthetic fibres.

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 8/16

SECTION 8: Exposure controls/personal protection

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.

Environmental exposure

: Do not allow to enter drains or watercourses.

controls

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Solid. [Paste.] Colour : Orange.

Odour Characteristic. **Odour threshold** : Not applicable. : Not applicable. Melting point/freezing point : Not applicable. Initial boiling point and : Not available.

boiling range

Closed cup: 105°C Flash point

Not available. **Evaporation rate** Flammability (solid, gas) : Not applicable. Upper/lower flammability or : 1.3 - 13%

explosive limits

Not available.

Vapour pressure Not available. Vapour density **Density** 1.6 g/cm³

Solubility(ies) : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/ : Not available.

water

: Not available. **Auto-ignition temperature Decomposition temperature** : Not available.

Kinematic (40°C): >0.205 cm²/s (>20.5 mm²/s) **Viscosity**

Explosive properties : Not available. Oxidising properties Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

: Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

: When exposed to high temperatures may produce hazardous decomposition

products.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

Date of issue/Date of revision : 05.06.2019 Date of previous issue Version:1 9/16 : No previous validation

SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products

Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine, formaldehyde, polymer with benzenamine, hydrogenated, Amines, polyethylenepoly-, triethylenetetramine fraction, polyethylenepolyamines, 3-aminopropyldimethylamine; N,N-dimethyl-1,3-diaminopropane, 4,4'-methylenebis(cyclohexylamine). May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	LD50 Oral	Rat	1230 mg/kg	-
2,4,6-tris (dimethylaminomethyl) phenol	LD50 Oral	Rat	1673 mg/kg	-
Amines, polyethylenepoly-, triethylenetetramine fraction	LD50 Dermal	Rabbit - Male, Female	1465.4 mg/kg	-
-	LD50 Oral	Rat - Male, Female	1716.2 mg/kg	-
3-aminopropyldimethylamine; N,N-dimethyl-1, 3-diaminopropane	LD50 Oral	Rat	1870 mg/kg	-

Conclusion/Summary

: Not available.

Acute toxicity estimates

Route	ATE value
Dermal	7426.8 mg/kg 121307.9 mg/kg 95.62 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2,4,6-tris (dimethylaminomethyl) phenol	Eyes - Severe irritant	Rabbit	-	24 hours 50 µg	-
•	Skin - Mild irritant	Rat	-	0.025 ml	-
	Skin - Severe irritant	Rat	-	0.25 ml	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 mg	-
3-aminopropyldimethylamine; N,N-dimethyl-1, 3-diaminopropane	Eyes - Moderate irritant	Rabbit	-	5 milligrams	-

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 10/16

SECTION 11: Toxicological information

: Not available.

| 4,4'-methylenebis | Eyes - Severe irritant | Rabbit | - | 24 hours 10 | - | (cyclohexylamine) | - | microliters |

Conclusion/Summary

<u>Sensitisation</u>

Conclusion/Summary: Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary: Not available.

Reproductive toxicity

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
formaldehyde, polymer with benzenamine, hydrogenated 4,4'-methylenebis(cyclohexylamine)	Category 2 Category 2		kidneys liver

Aspiration hazard

Not available.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
Amines, polyethylenepoly-, triethylenetetramine fraction	Acute EC50 20 mg/l	Algae	72 hours
	Acute EC50 31.1 mg/l	Daphnia	48 hours
	Acute LC50 330 mg/l	Fish	96 hours
4,4'-methylenebis (cyclohexylamine)	Acute EC50 6.84 mg/l	Daphnia	48 hours
	Acute IC50 140 mg/l Acute LC50 46 mg/l	Algae Fish	72 hours 96 hours

Conclusion/Summary: This material is harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary: Not available.

Date of issue/Date of revision: 05.06.2019Date of previous issue: No previous validationVersion: 1

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol Amines, polyethylenepoly-, triethylenetetramine fraction 4,4'-methylenebis (cyclohexylamine)	-		Readily Not readily Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
benzyl alcohol	0.87	<100	low
formaldehyde, polymer with	-	209 to 219	low
benzenamine, hydrogenated			
2,4,6-tris	0.219	-	low
(dimethylaminomethyl)			
phenol			
Amines, polyethylenepoly-,	-2.65	-	low
triethylenetetramine fraction			
polyethlyenepolyamines	-3.16	-	low
3-aminopropyldimethylamine;	-0.352	-	low
N,N-dimethyl-1,			
3-diaminopropane			
4,4'-methylenebis	2.03	-	low
(cyclohexylamine)			

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects: No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

Yes.

Disposal considerations

Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 12/16

SECTION 13: Disposal considerations

European waste catalogue (EWC) : 08 01 11* Waste paint and varnish containing organic solvents or other dangerous

Packaging

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal considerations

: Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Dispose of containers contaminated by the product in accordance with local or

national legal provisions.

Type of packaging		European waste catalogue (EWC)
CEPE Paint Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

ADR/RID

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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 Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Date of issue/Date of revision : 05.06.2019 Version:1 13/16 Date of previous issue : No previous validation

SECTION 15: Regulatory information

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the

product label and/or technical data sheet for further information.

VOC for Ready-for-Use

Mixture

: Not applicable.

Europe inventory : At least one component is not listed.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
	· ·	talco (con fibras de amianto)	Carc. 1A	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety : Not applicable.

assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 14/16

SECTION 16: Other information

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H226	Flammable liquid and vapour.
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373 (oral)	May cause damage to organs through prolonged or repeated exposure if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

	+
Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Chronic 2, H411	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3, H412	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Skin Corr. 1B, H314	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C, H314	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1, H317	SKIN SENSITISATION - Category 1
Skin Sens. 1A, H317	SKIN SENSITISATION - Category 1A
Skin Sens. 1B, H317	SKIN SENSITISATION - Category 1B
STOT RE 2, H373 (oral)	SPECIFIC TARGET ORGAN TOXICITY - REPEATED
	EXPOSURE (oral) - Category 2
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED
	EXPOSURE - Category 2
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Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 15/16

Conforms to Regulation (EC) No. 453/2010 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

Epoxy Repair NG Comp B

SECTION 16: Other information

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

Date of issue/Date of revision : 05.06.2019 Date of previous issue : No previous validation Version : 1 16/16