

BEZILLO[®]

SUPERIOR QUALITY PRODUCTS.

BEZILLO OPTIVIX

Knife Grade extra strong transparent Solid Glue for
Natural Stones, Quartz & Ceramic. Ideal for white material



Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Product name	BEZILLO OPTIVIX

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

Intended use	UNSATURATED POLYESTER RESIN ☐ RESIN FOR COMPOSITE MATERIALS
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1.3. Details of the supplier of the safety data sheet

Name	BETON
Registered office	B/2, Amrat Niwas, 15th Sarojini Road, Ville Parle West, Mumbai 400 056 India Tel. +91 99301 28291
e-mail address of the competent person responsible for the Safety Data Sheet	info@betonstonesolutions.com

1.4. Emergency telephone number

For urgent inquiries refer to	B/2, Amrat Niwas, 15th Sarojini Road, Ville Parle (W), Mumbai - 400056, India. Tel. +91 99301 28291
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SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Reproductive toxicity, category 2	H361d	Suspected of damaging the unborn child.
Specific target organ toxicity - repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms:	

Signal words:	Danger
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Hazard statements:

H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

EUH205	Contains epoxy constituents. May produce an allergic reaction.
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Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P331	Do NOT induce vomiting.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P301+P310	IF SWALLOWED: immediately call a POISON CENTER / doctor / . . .
P370+P378	In case of fire: use . . . to extinguish.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
Contains:	STYRENE
	REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
	TRIMETHYLOLPROPANE TRIACRYLATE
	reaction product: bisphenol-F-(epichlorhydrin) MW < 700
	MALEIC ANHYDRIDE

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)	
STYRENE			
CAS 100-42-5	$27 \leq x < 28,5$	Flam. Liq. 3 H226, Repr. 2 H361d, Acute Tox. 4 H332, STOT RE 1 H372, Asp. Tox. 1 H304, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note according to Annex VI to the CLP Regulation: D	
EC 202-851-5			
INDEX 601-026-00-0			
Reg. no. 01-2119457861-32			
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)			

CAS 25068-38-6	$9 \leq x < 10,5$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411	
EC 500-033-5			
INDEX 603-074-00-8			
reaction product: bisphenol-F- (epichlorhydrin) MW < 700			
CAS 9003-36-5	$3 \leq x < 3,5$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411	
EC 500-006-8			
INDEX -			
Reg. no. 01-2119454392-40			
TRIMETHYLOLPROPANE TRIACRYLATE			
CAS 15625-89-5	$2 \leq x < 2,5$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: D	
EC 239-701-3			
INDEX 607-111-00-9			
MALEIC ANHYDRIDE			
CAS 108-31-6	$0,05 \leq x < 0,1$	Acute Tox. 4 H302, STOT RE 1 H372, Skin Corr. 1B H314, Eye Dam. 1 H318, Resp. Sens. 1 H334, Skin Sens. 1A H317, EUH071	
EC 203-571-6			
INDEX 607-096-00-9			
XYLENE (MIXTURE OF ISOMERS)			
CAS 1330-20-7	$0 \leq x < 0,05$	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Classification note according to Annex VI to the CLP Regulation: C	
EC 215-535-7			
INDEX 601-022-00-9			
Reg. no. 01-2119488216-32-XXXX			
DIPROPYLENE GLYCOL MONOMETHYL ETHER			
CAS 34590-94-8	$0 \leq x < 0,05$	Substance with a community workplace exposure limit.	
EC 252-104-2			

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

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

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

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

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition,published 2018)

ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

STYRENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	86	20	172	40		
MAK	DEU	86	20	172	40		
VLEP	FRA	100	23,3	200	46,6		
WEL	GBR	430	100	1080	250		
TLV-ACGIH		85	20	170	40		
Predicted no-effect concentration - PNEC							
Normal value in fresh water		0,028		mg/l			
Normal value in marine water		0,0028		mg/l			
Normal value for fresh water sediment		0,614		mg/kg			
Normal value for marine water sediment		0,0614		mg/kg			
Normal value for the terrestrial compartment		0,2		mg/kg			

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				2,1 mg/kg bw/d				
Inhalation	182,75 mg/m3	174,25 mg/m3		10,2 mg/m3	306 mg/m3	289 mg/m3		85 mg/m3
Skin				343 mg/kg bw/d				406 mg/kg bw/d

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	440	100	880	200	SKIN	
MAK	DEU	440	100	880	200	SKIN	
VLEP	FRA	221	50	442	100	SKIN	
WEL	GBR	220	50	441	100	SKIN	
VLEP	ITA	221	50	442	100	SKIN	
OEL	EU	221	50	442	100	SKIN	
TLV-ACGIH		434	100	651	150		

Predicted no-effect concentration - PNEC			
Normal value in fresh water	0,327	mg/l	
Normal value for fresh water sediment	12,46	mg/kg	
Normal value for marine water sediment	12,46	mg/kg	
Normal value for water, intermittent release	0,327	mg/l	
Normal value of STP microorganisms	6,58	mg/l	
Normal value for the terrestrial compartment	2,31	mg/kg	

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				12,5 mg/kg bw/d				
Inhalation			1872 mg/m ³					77 mg/m ³
Skin				108 mg/kg bw/d				180 mg/kg bw/d

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m ³	ppm	mg/m ³	ppm		
AGW	DEU	310	50	310	50		
MAK	DEU	310	50	310	50		
VLEP	FRA	308	50			SKIN	
WEL	GBR	308	50			SKIN	
VLEP	ITA	308	50			SKIN	
OEL	EU	308	50			SKIN	
TLV-ACGIH		606	100	909	150	SKIN	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

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

TLV of solvent mixture: 85 mg/m³

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

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

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category III professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

RESPIRATORY PROTECTION

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

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

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

ENVIRONMENTAL EXPOSURE CONTROLS

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

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	pasta-gel	
Colour	neutral	
Odour	characteristic	
Odour threshold	0,1 ppm	Remark:<<Error>>Manca la traduzione (N04-1001)
pH	Not available	Concentration:<<Error>>Manca la traduzione (P00-1006)

		Reason for missing data:<<Error>>Manca la traduzione (Z00-1002)
Melting point / freezing point	Not available	
Initial boiling point	145 °C	Substance:STYRENE
Boiling range	Not available	
Flash point	31 °C	Substance:STYRENE
Evaporation Rate	Not available	
Flammability of solids and gases	Not available	
Lower inflammability limit	1,2 % (V/V)	
Upper inflammability limit	8,9 % (V/V)	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Vapour pressure	6,67 hPa	Substance:STYRENE
Vapour density	3,6	Remark:<<Error>>Manca la traduzione (N17-1001)
		Temperature:<<Error>>Manca la traduzione (T00-1001)
Relative density	1,1 g/cm3	Temperature:
Solubility	slightly soluble	Remark:<<Error>>Manca la traduzione (N19-1001)
		Temperature:
Partition coefficient: n-octanol/water	Not available	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	>20,5 mm2/sec (40°C)	
Explosive properties	Not available	
Oxidising properties	Not available	

9.2. Other information

Total solids (250□C / 482□F)	12,77 %	
VOC (Directive 2010/75/EC) :	25,66 % - 287,00 g/litre	
VOC (volatile carbon) :	27,02 % - 297,22 g/litre	

SECTION 10. Stability and reactivity

10.1. Reactivity

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

STYRENE

Polymerises at temperatures above 65□C/149□F.Fire hazard.Possibility of explosion.

Added with an inhibitor that requires a small amount of dissolved oxygen at temperatures < 25□C/77□F.

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Forms peroxides with: air.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

STYRENE

May react dangerously with: peroxides, strong acids. May polymerise on contact with: aluminium trichloride, azobisisobutyronitrile, dibenzoyl peroxide, sodium. Risk of explosion on contact with: butyllithium, chlorosulphuric acid, di-tert-butyl peroxide, oxidising substances, oxygen.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

DIPROPYLENE GLYCOL MONOMETHYL ETHER

May react violently with: strong oxidising agents.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

STYRENE

Avoid contact with: oxidising substances, copper, strong acids.

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Avoid exposure to: sources of heat. Possibility of explosion.

10.5. Incompatible materials

STYRENE

Incompatible materials: plastic materials.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information

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

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

STYRENE

WORKERS: inhalation; contact with the skin.

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

STYRENE

The acute toxicity by inhalation at 1000 ppm affects the central nervous system with headache and dizziness, lack of coordination; irritation of the eye and respiratory tract mucous membranes occurs at 500 ppm. Chronic exposure causes depression of the central and peripheral nervous system with loss of memory, headache and drowsiness starting at 20 ppm; digestive disorders with nausea and loss of appetite; irritation of the respiratory tract with chronic bronchitis; dermatosis. Repeated exposure, at low doses of inhaled substance, causes irreversible changes to hearing and may cause changes in colour vision. No certain data is available on the reversibility of the visual impairment. Repeated skin exposure causes irritation. The substance degrades the skin, which can cause dryness and cracking.

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

Interactive effects

STYRENE

The metabolism of the substance is inhibited by ethanol. When styrene is photo-oxidised with ozone and nitrogen dioxide, as in the formation of smog, products highly irritating for the human eye may ensue.

XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

> 20 mg/l
LD50 (Oral) of the mixture:
Not classified (no significant component)
LD50 (Dermal) of the mixture:
Not classified (no significant component)

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral) 3523 mg/kg Rat

LD50 (Dermal) 12126 mg/kg Rabbit

LC50 (Inhalation) 27 mg/l/4h Rat

STYRENE

LD50 (Oral) 2650 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Ratto

LC50 (Inhalation) 11,8 mg/l/4h Rat

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

LD50 (Oral) 15000 mg/kg Ratto

LD50 (Dermal) 23000 mg/kg Ratto

MALEIC ANHYDRIDE

LD50 (Oral) 400 mg/kg Rat

LD50 (Dermal) 610 mg/kg Rat

reaction product: bisphenol-F-(epichlorhydrin) MW < 700

LD50 (Oral) > 5000 mg/kg Ratto

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

STYRENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2002).

Classified as "probable carcinogen" by the US National Toxicology Program (NTP) - (US DHHS, 2014).

XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Suspected of damaging the unborn child

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

Causes damage to organs

ASPIRATION HAZARD

Toxic for aspiration

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

XYLENE (MIXTURE OF ISOMERS)		
LC50 - for Fish		3,2 mg/l/96h
EC50 - for Crustacea		1 mg/l/48h
EC50 - for Algae / Aquatic Plants		2,6 mg/l/72h

STYRENE		
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LC50 - for Fish		4,02 mg/l/96h
EC50 - for Crustacea		4,7 mg/l/48h
EC50 - for Algae / Aquatic Plants		4,9 mg/l/72h

12.2. Persistence and degradability

XYLENE (MIXTURE OF ISOMERS)		
Solubility in water		100 - 1000 mg/l
Degradability: information not available		

DIPROPYLENE GLYCOL MONOMETHYL ETHER		
Solubility in water		1000 - 10000 mg/l
Rapidly degradable		

STYRENE		
Solubility in water		320 mg/l
Rapidly degradable		

REACTION PRODUCT: BISPHENOL A- (EPICHLORHYDRIN)		
Solubility in water		0,1 - 100 mg/l
NOT rapidly degradable		

MALEIC ANHYDRIDE		
Solubility in water		> 10000 mg/l
Entirely degradable		

TRIMETHYLOLPROPANE TRIACRYLATE		
Solubility in water		100 - 1000 mg/l
Rapidly degradable		

12.3. Bioaccumulative potential

XYLENE (MIXTURE OF ISOMERS)		
Partition coefficient: n-octanol/water		3,12
BCF		25,9

DIPROPYLENE GLYCOL MONOMETHYL ETHER		
Partition coefficient: n-octanol/water		0,0043

STYRENE		
Partition coefficient: n-octanol/water		2,96
BCF		74

REACTION PRODUCT: BISPHENOL A- (EPICHLORHYDRIN)		
Partition coefficient: n-octanol/water		> 2,918
BCF		31

MALEIC ANHYDRIDE		
Partition coefficient: n-octanol/water		-2,78

TRIMETHYLOLPROPANE TRIACRYLATE		
Partition coefficient: n-octanol/water		0,67

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)		
Partition coefficient: soil/water		2,73

STYRENE		
Partition coefficient: soil/water		2,55

REACTION PRODUCT: BISPHENOL A- (EPICHLORHYDRIN)		
Partition coefficient: soil/water		2,65

TRIMETHYLOLPROPANE TRIACRYLATE		
Partition coefficient: soil/water		2,2

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

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

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA:	1866					
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14.2. UN proper shipping name

ADR / RID:	RESIN SOLUTION					
IMDG:	RESIN SOLUTION					
IATA:	RESIN SOLUTION					

14.3. Transport hazard class(es)

ADR / RID:	Class: 3	Label: 3				
IMDG:	Class: 3	Label: 3				
IATA:	Class: 3	Label: 3				

14.4. Packing group

ADR / RID, IMDG, IATA:	II					
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14.5. Environmental hazards

ADR / RID:	NO					
IMDG:	NO					
IATA:	NO					

14.6. Special precautions for user

ADR / RID:		HIN - Kemler: 33		Limited Quantities: 5 L		Tunnel restriction code: (D/E)
		Special Provision: 640D				
IMDG:		EMS: F-E, <u>S</u> - <u>E</u>		Limited Quantities: 5 L		

IATA:		Cargo:		Maximum quantity: 60 L		Packaging instructions: 364
		Pass.:		Maximum quantity: 5 L		Packaging instructions: 353
		Special Instructions:		A3		

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

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point	3 - 40	
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Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

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

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3	
Repr. 2	Reproductive toxicity, category 2	
Acute Tox. 4	Acute toxicity, category 4	
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1	
Asp. Tox. 1	Aspiration hazard, category 1	
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2	
Skin Corr. 1B	Skin corrosion, category 1B	
Eye Irrit. 2	Eye irritation, category 2	
Skin Irrit. 2	Skin irritation, category 2	
STOT SE 3	Specific target organ toxicity - single exposure, category 3	
Resp. Sens. 1	Respiratory sensitization, category 1	
Skin Sens. 1	Skin sensitization, category 1	
Skin Sens. 1A	Skin sensitization, category 1A	
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3	
H226	Flammable liquid and vapour.	
H361d	Suspected of damaging the unborn child.	
H302	Harmful if swallowed.	
H312	Harmful in contact with skin.	
H332	Harmful if inhaled.	
H372	Causes damage to organs through prolonged or repeated exposure.	
H304	May be fatal if swallowed and enters airways.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H314	Causes severe skin burns and eye damage.	
H319	Causes serious eye irritation.	
H315	Causes skin irritation.	
H335	May cause respiratory irritation.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H317	May cause an allergic skin reaction.	
H411	Toxic to aquatic life with long lasting effects.	

H412	Harmful to aquatic life with long lasting effects.	
EUH071	Corrosive to the respiratory tract.	
EUH205	Contains epoxy constituents. May produce an allergic reaction.	

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
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 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanit ) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply

with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.



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