



**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** Gravel Bonding Resin - Resin
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Resin. For professional user/industrial user only.  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
Supplier Eli-Chem Resins UK Ltd T/A  
FixMaster  
212 Dunsfold Park  
Stovolds Hill  
Cranleigh  
GU6 8GA (UK)  
+44 (0)1483 266636 (09:00 - 17:00 Mon-Thur / 09:00 - 16:00 Fri)  
support@FixMaster.co.uk
- 1.4 Emergency telephone number:** +44 (0)1483 266636 office hours only

**SECTION 2: HAZARDS IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
This product contains less than 1% respirable crystalline silica, so it does not require classification  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Skin Irrit. 2: Skin irritation, Category 2, H315  
Skin Sens. 1: Sensitisation, skin, Category 1, H317
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
**Warning**
-  
- Hazard statements:**  
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects  
Eye Irrit. 2: H319 - Causes serious eye irritation  
Skin Irrit. 2: H315 - Causes skin irritation  
Skin Sens. 1: H317 - May cause an allergic skin reaction
- Precautionary statements:**  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray  
P264: Wash thoroughly after handling  
P273: Avoid release to the environment  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P302+P352: IF ON SKIN: Wash with plenty of water  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P391: Collect spillage  
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively
- Supplementary information:**  
EUH205: Contains epoxy constituents. May produce an allergic reaction
- Substances that contribute to the classification**  
reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ); Bisphenol-F-epichlorhydrine/epoxy resins; oxirane, mono[(C12-14-alkyloxy)methyl] derivs.  
**UFI:** H720-10KV-N00K-MS9E
- 2.3 Other hazards:**

**SECTION 2: HAZARDS IDENTIFICATION (continued)**

Product fails to meet PBT/vPvB criteria

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substance:**

Non-applicable

**3.2 Mixture:**

**Chemical description:** Mixture composed of additives and epoxy polymers

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 25068-38-6 EC: 500-033-5 Index: 603-074-00-8 REACH: 01-2119456619-26-XXXX	<b>reaction product: bisphenol-A-(epichlorhydrin) ( MW &lt; 700 )(1)</b> ATP CLP00	<b>50 - &lt;75 %</b>
	Regulation 1272/2008 Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	
CAS: 9003-36-5 EC: Non-applicable Index: Non-applicable REACH: 01-2119454392-40-XXXX	<b>Bisphenol-F-epichlorhydrine/epoxy resins(1)</b> Self-classified	<b>25 - &lt;50 %</b>
	Regulation 1272/2008 Aquatic Chronic 2: H411; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	
CAS: 68609-97-2 EC: 271-846-8 Index: 603-103-00-4 REACH: 01-2119485289-22-XXXX	<b>oxirane, mono[(C12-14-alkyloxy)methyl] derivs.(1)</b> ATP CLP00	<b>10 - &lt;25 %</b>
	Regulation 1272/2008 Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	
CAS: 108-65-6 EC: 203-603-9 Index: 607-195-00-7 REACH: 01-2119475791-29-XXXX	<b>2-methoxy-1-methylethyl acetate(1)</b> Self-classified	<b>3 - &lt;5 %</b>
	Regulation 1272/2008 Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	
CAS: 141-32-2 EC: 205-480-7 Index: 607-062-00-3 REACH: 01-2119453155-43-XXXX	<b>n-butyl acrylate(2)</b> Self-classified	<b>&lt;1 %</b>
	Regulation 1272/2008 Acute Tox. 4: H332; Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1B: H317; STOT SE 3: H335 - Warning	

(1) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

(2) Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**Other information:**

Identification	Specific concentration limit
reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) CAS: 25068-38-6 EC: 500-033-5	% (w/w) >=5: Skin Irrit. 2 - H315 % (w/w) >=5: Eye Irrit. 2 - H319

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

**SECTION 4: FIRST AID MEASURES (continued)**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media:**

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use full jet water as an extinguishing agent.

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures:**

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**6.2 Environmental precautions:**

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling:**

**SECTION 7: HANDLING AND STORAGE (continued)**

**A.- Precautions for safe manipulation**

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

**B.- Technical recommendations for the prevention of fires and explosions**

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid splashes and pulverizations. Consult section 10 for conditions and materials that should be avoided.

**C.- Technical recommendations to prevent ergonomic and toxicological risks**

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

**D.- Technical recommendations to prevent environmental risks**

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

**7.2 Conditions for safe storage, including any incompatibilities:**

**A.- Technical measures for storage**

Minimum Temp.: 2 °C  
Maximum Temp.: 35 °C  
Maximum time: 24 Months

**B.- General conditions for storage**

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace (FH40/2005 Workplace exposure limits):

Identification	Occupational exposure limits		
	WEL (8h)	WEL (15 min)	WEL (8h)
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	50 ppm	100 ppm	274 mg/m <sup>3</sup>
n-butyl acrylate CAS: 141-32-2 EC: 205-480-7	1 ppm	5 ppm	5 mg/m <sup>3</sup>
			26 mg/m <sup>3</sup>

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) CAS: 25068-38-6 EC: 500-033-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	8.33 mg/kg	Non-applicable	8.33 mg/kg	Non-applicable
	Inhalation	12.25 mg/m <sup>3</sup>	Non-applicable	12.25 mg/m <sup>3</sup>	Non-applicable
Bisphenol-F-epichlorhydrine/epoxy resins CAS: 9003-36-5 EC: Non-applicable	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	104.15 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	29.39 mg/m <sup>3</sup>	Non-applicable
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. CAS: 68609-97-2 EC: 271-846-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	17 mg/kg	Non-applicable	3.9 mg/kg	Non-applicable
	Inhalation	29 mg/m <sup>3</sup>	9.8 mg/m <sup>3</sup>	13.8 mg/m <sup>3</sup>	0.98 mg/m <sup>3</sup>
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	153.5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	275 mg/m <sup>3</sup>	Non-applicable

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
n-butyl acrylate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 141-32-2	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 205-480-7	Inhalation	Non-applicable	Non-applicable	Non-applicable	11 mg/m <sup>3</sup>

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) CAS: 25068-38-6 EC: 500-033-5	Oral	0.75 mg/kg	Non-applicable	0.75 mg/kg	Non-applicable
	Dermal	3.571 mg/kg	Non-applicable	3.571 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
Bisphenol-F-epichlorhydrine/epoxy resins CAS: 9003-36-5 EC: Non-applicable	Oral	Non-applicable	Non-applicable	6.25 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	62.5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	8.7 mg/m <sup>3</sup>	Non-applicable
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. CAS: 68609-97-2 EC: 271-846-8	Oral	1219 mg/kg	Non-applicable	1 mg/kg	Non-applicable
	Dermal	10 mg/kg	Non-applicable	2.35 mg/kg	Non-applicable
	Inhalation	7.6 mg/m <sup>3</sup>	2.9 mg/m <sup>3</sup>	4.1 mg/m <sup>3</sup>	1.46 mg/m <sup>3</sup>
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Oral	Non-applicable	Non-applicable	1.67 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	54.8 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	33 mg/m <sup>3</sup>	Non-applicable

**PNEC:**

Identification				
reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) CAS: 25068-38-6 EC: 500-033-5	STP	10 mg/L	Fresh water	0.006 mg/L
	Soil	0.196 mg/kg	Marine water	0.0006 mg/L
	Intermittent	0.018 mg/L	Sediment (Fresh water)	0.996 mg/kg
	Oral	11 g/kg	Sediment (Marine water)	0.0996 mg/kg
Bisphenol-F-epichlorhydrine/epoxy resins CAS: 9003-36-5 EC: Non-applicable	STP	10 mg/L	Fresh water	0.003 mg/L
	Soil	0.237 mg/kg	Marine water	0.0003 mg/L
	Intermittent	0.0254 mg/L	Sediment (Fresh water)	0.294 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.0294 mg/kg
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. CAS: 68609-97-2 EC: 271-846-8	STP	10 mg/L	Fresh water	0.0072 mg/L
	Soil	80.12 mg/kg	Marine water	0.00072 mg/L
	Intermittent	0.072 mg/L	Sediment (Fresh water)	66.77 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	6.677 mg/kg
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	STP	100 mg/L	Fresh water	0.635 mg/L
	Soil	0.29 mg/kg	Marine water	0.0635 mg/L
	Intermittent	6.35 mg/L	Sediment (Fresh water)	3.29 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.329 mg/kg
n-butyl acrylate CAS: 141-32-2 EC: 205-480-7	STP	3.5 mg/L	Fresh water	0.00272 mg/L
	Soil	1 mg/kg	Marine water	0.00027 mg/L
	Intermittent	0.011 mg/L	Sediment (Fresh water)	0.0338 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.00338 mg/kg

**8.2 Exposure controls:**



**A.- General security and hygiene measures in the work place**

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.



All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

**B.- Respiratory protection**

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

### C.- Specific protection for the hands


Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+A1:2009 and EN ISO 374-1:2016

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"



### D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

### E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

### F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

### Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	4.42 % weight
V.O.C. density at 20 °C:	47.02 kg/m <sup>3</sup> (47.02 g/L)
Average carbon number:	6.17
Average molecular weight:	131.46 g/mol

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties:

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C:	Liquid
Appearance:	Viscous
Colour:	Yellowish
Odour:	Solvent
Odour threshold:	Non-applicable *

**Volatility:**

Boiling point at atmospheric pressure:	147 °C
Vapour pressure at 20 °C:	359 Pa
Vapour pressure at 50 °C:	2235.73 Pa (2.24 kPa)
Evaporation rate at 20 °C:	Non-applicable *

**Product description:**

Density at 20 °C:	1062.9 kg/m <sup>3</sup>
Relative density at 20 °C:	1.063
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20.5 cSt
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Immiscible
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

**Flammability:**

Flash Point:	>61 °C (Does not maintain combustion)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	292 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

**Explosive:**

Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

**9.2 Other information:**

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity:**

**SECTION 10: STABILITY AND REACTIVITY (continued)**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.  
IARC: Silicon dioxide (RCS < 1%) (3); n-butyl acrylate (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:



**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) CAS: 25068-38-6 EC: 500-033-5	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L (4 h)	
Bisphenol-F-epichlorhydrine/epoxy resins CAS: 9003-36-5 EC: Non-applicable	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. CAS: 68609-97-2 EC: 271-846-8	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L (4 h)	
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	LD50 oral	8532 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rat
	LC50 inhalation	30 mg/L (4 h)	Rat
n-butyl acrylate CAS: 141-32-2 EC: 205-480-7	LD50 oral	4000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	

**Acute Toxicity Estimate (ATE mix):**

ATE mix		Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	>2000 mg/kg (Calculation method)	Non-applicable
Inhalation	>20 mg/L (4 h) (Calculation method)	Non-applicable

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

Identification	Acute toxicity		Species	Genus
reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) CAS: 25068-38-6 EC: 500-033-5	LC50	1 - 10 mg/L (96 h)		Fish
	EC50	1 - 10 mg/L		Crustacean
	EC50	1 - 10 mg/L		Algae
Bisphenol-F-epichlorhydrine/epoxy resins CAS: 9003-36-5 EC: Non-applicable	LC50	1 - 10 mg/L (96 h)		Fish
	EC50	1 - 10 mg/L		Crustacean
	EC50	1 - 10 mg/L		Algae
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	LC50	161 mg/L (96 h)	Pimephales promelas	Fish
	EC50	481 mg/L (48 h)	Daphnia sp.	Crustacean
	EC50	Non-applicable		

**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Identification	Acute toxicity		Species	Genus
	LC50	EC50		
n-butyl acrylate CAS: 141-32-2 EC: 205-480-7	LC50	5.2 mg/L (96 h)	Salmo gairdneri	Fish
	EC50	230 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	5.5 mg/L (96 h)	Selenastrum capricornutum	Algae

**12.2 Persistence and degradability:**

Identification	Degradability		Biodegradability	
	BOD5	COD	Concentration	Period
reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) CAS: 25068-38-6 EC: 500-033-5	Non-applicable	Non-applicable	100 mg/L	28 days
	Non-applicable	Non-applicable	0 %	
	Non-applicable	0.56	61.3 %	
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Non-applicable	Non-applicable	785 mg/L	8 days
	Non-applicable	Non-applicable	100 %	
	Non-applicable	Non-applicable	100 mg/L	14 days
n-butyl acrylate CAS: 141-32-2 EC: 205-480-7	Non-applicable	Non-applicable	100 mg/L	14 days
	Non-applicable	Non-applicable	61.3 %	
	0.56	61.3 %		

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential	
	BCF	Pow Log
reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) CAS: 25068-38-6 EC: 500-033-5	4	2.8
	Low	
	Low	
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	1	0.43
	Low	
	Low	
n-butyl acrylate CAS: 141-32-2 EC: 205-480-7	37	2.36
	Moderate	
	Moderate	

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
	Koc	Conclusion	Henry	Dry soil
n-butyl acrylate CAS: 141-32-2 EC: 205-480-7	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	2.598E-2 N/m (25 °C)	Moist soil	Non-applicable	Non-applicable

**12.5 Results of PBT and vPvB assessment:**

Product fails to meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

Code	Description	Waste class (Regulation (EU) No 1357/2014)
20 01 27*	paint, inks, adhesives and resins containing hazardous substances	Dangerous

**Type of waste (Regulation (EU) No 1357/2014):**

HP14 Ecotoxic, HP13 Sensitising, HP4 Irritant — skin irritation and eye damage

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC, The Waste Regulations 2011, 2011 No. 988). As under 15 01 (2014/955/EU) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

**Regulations related to waste management:**

## SECTION 13: DISPOSAL CONSIDERATIONS (continued)

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated  
Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

## SECTION 14: TRANSPORT INFORMATION

### Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:



- |   |  |
|---|--|
| <b>14.1 UN number:</b>  | UN3082   |
| <b>14.2 UN proper shipping name:</b>  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )) |
| <b>14.3 Transport hazard class(es):</b>   | 9  |
| Labels:   | 9  |
| <b>14.4 Packing group:</b>  | III  |
| <b>14.5 Environmental hazards:</b>  | Yes  |
| <b>14.6 Special precautions for user</b>  |  |
| Special regulations:  | 274, 335, 375, 601   |
| Tunnel restriction code:  | Non-applicable   |
| Physico-Chemical properties:  | see section 9  |
| Limited quantities:   | 5 L  |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable   |

### Transport of dangerous goods by sea:

With regard to IMDG 39-18:



- |   |  |
|---|--|
| <b>14.1 UN number:</b>  | UN3082   |
| <b>14.2 UN proper shipping name:</b>  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )) |
| <b>14.3 Transport hazard class(es):</b>   | 9  |
| Labels:   | 9  |
| <b>14.4 Packing group:</b>  | III  |
| <b>14.5 Environmental hazards:</b>  | Yes  |
| <b>14.6 Special precautions for user</b>  |  |
| Special regulations:  | 335, 969, 274  |
| EmS Codes:  | F-A, S-F   |
| Physico-Chemical properties:  | see section 9  |
| Limited quantities:   | 5 L  |
| Segregation group:  | Non-applicable   |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable   |

## SECTION 14: TRANSPORT INFORMATION (continued)

### Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:



- 14.1 UN number:** UN3082  
**14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ))  
**14.3 Transport hazard class(es):** 9  
**Labels:** 9  
**14.4 Packing group:** III  
**14.5 Environmental hazards:** Yes  
**14.6 Special precautions for user**  
 Physico-Chemical properties: see section 9  
**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

## SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

#### Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
E2	ENVIRONMENTAL HAZARDS	200	500

#### Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

#### Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

#### Other legislation:

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009), SI 2009 No 1348  
 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011, 2011 No. 1885  
 Control of Substances Hazardous to Health Regulations 2002 (as amended)  
 EH40/2005 Workplace exposure limits  
 The Waste Regulations 2011, 2011 No. 988

### 15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

## SECTION 16: OTHER INFORMATION

### Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

### Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

### Texts of the legislative phrases mentioned in section 2:

**SECTION 16: OTHER INFORMATION (continued)**

H315: Causes skin irritation  
H317: May cause an allergic skin reaction  
H411: Toxic to aquatic life with long lasting effects  
H319: Causes serious eye irritation

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Acute Tox. 4: H332 - Harmful if inhaled  
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects  
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects  
Eye Irrit. 2: H319 - Causes serious eye irritation  
Flam. Liq. 3: H226 - Flammable liquid and vapour  
Skin Irrit. 2: H315 - Causes skin irritation  
Skin Sens. 1: H317 - May cause an allergic skin reaction  
Skin Sens. 1B: H317 - May cause an allergic skin reaction  
STOT SE 3: H335 - May cause respiratory irritation  
STOT SE 3: H336 - May cause drowsiness or dizziness

**Classification procedure:**

Skin Irrit. 2: Calculation method  
Skin Sens. 1: Calculation method  
Aquatic Chronic 2: Calculation method  
Eye Irrit. 2: Calculation method

**Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**


ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol-water partition coefficient  
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** Gravel Bonding Resin - Hardener
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Resin. For professional user/industrial user only.  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
Supplier Eli-Chem Resins UK Ltd T/A  
FixMaster  
212 Dunsfold Park  
Stovolds Hill  
Cranleigh  
GU6 8GA (UK)  
+44 (0)1483 266636 (09:00 - 17:00 Mon-Thur / 09:00 - 16:00 Fri)  
support@FixMaster.co.uk
- 1.1 Emergency telephone number:** +44 (0)1483 266636 office hours only

**SECTION 2: HAZARDS IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Acute Tox. 4: Acute toxicity, Category 4, H302+H332  
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412  
Eye Dam. 1: Serious eye damage, Category 1, H318  
Repr. 2: Reproductive toxicity, Category 2, H361d  
Skin Corr. 1B: Skin corrosion, Category 1B, H314  
Skin Sens. 1B: Sensitisation, skin, Category 1B, H317
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
Danger
- 
- Hazard statements:**  
Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled  
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects  
Repr. 2: H361d - Suspected to damage the foetus  
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage  
Skin Sens. 1B: H317 - May cause an allergic skin reaction
- Precautionary statements:**  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
P302+P352: IF ON SKIN: Wash with plenty of water  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308+P313: IF exposed or concerned: Get medical advice/attention  
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively
- Supplementary information:**  
EUH071: Corrosive to the respiratory tract
- Substances that contribute to the classification**  
benzyl alcohol; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; m-phenylenebis(methylamine); 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine); Salicylic acid  
**UFI:** XA20-J098-Y003-83VG

## SECTION 2: HAZARDS IDENTIFICATION (continued)

### 2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substance:






Non-applicable

### 3.2 Mixture:

**Chemical description:** Formulated polyamines

#### Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 100-51-6 EC: 202-859-9 Index: 603-057-00-5 REACH: 01-2119492630-38-XXXX	<b>benzyl alcohol</b> <sup>(4)</sup> Regulation 1272/2008 Acute Tox. 4: H302+H332 - Warning	ATP CLP00  50 - <75 %
CAS: 2855-13-2 EC: 220-666-8 Index: 612-067-00-9 REACH: 01-2119514687-32-XXXX	<b>3-aminomethyl-3,5,5-trimethylcyclohexylamine</b> <sup>(4)</sup> Regulation 1272/2008 Acute Tox. 4: H302+H312; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	ATP CLP00  25 - <50 %
CAS: 1477-55-0 EC: 216-032-5 Index: Non-applicable REACH: 01-2119480150-50-XXXX	<b>m-phenylenebis(methylamine)</b> <sup>(4)</sup> Regulation 1272/2008 Acute Tox. 4: H302+H332; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; Skin Sens. 1B: H317; EUH071 - Danger	Self-classified  10 - <25 %
CAS: 113930-69-1 EC: 500-302-7 Index: Non-applicable REACH: 01-2119965162-39-XXXX	<b>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)</b> <sup>(4)</sup> Regulation 1272/2008 Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	Self-classified  5 - <10 %
CAS: 69-72-7 EC: 200-712-3 Index: 607-732-00-5 REACH: 01-2119486984-17-XXXX	<b>Salicylic acid</b> <sup>(4)</sup> Regulation 1272/2008 Acute Tox. 4: H302; Eye Dam. 1: H318; Repr. 2: H361d - Danger	ATP ATP13  5 - <10 %

<sup>(4)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

#### By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

#### By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

#### By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

#### By ingestion/aspiration:

**SECTION 4: FIRST AID MEASURES (continued)**

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media:**

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use full jet water as an extinguishing agent.

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

**6.2 Environmental precautions:**

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling:**

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions



**SECTION 7: HANDLING AND STORAGE (continued)**

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

**PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT.** Transfer in designated areas that comply with the necessary safety conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to small amounts only. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

**7.2 Conditions for safe storage, including any incompatibilities:**

A.- Technical measures for storage

Minimum Temp.: 2 °C  
Maximum Temp.: 35 °C  
Maximum time: 24 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	47 mg/kg	Non-applicable	9.5 mg/kg	Non-applicable
	Inhalation	450 mg/m <sup>3</sup>	Non-applicable	90 mg/m <sup>3</sup>	Non-applicable
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) CAS: 113930-69-1 EC: 500-302-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0.47 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	3.27 mg/m <sup>3</sup>	Non-applicable
Salicylic acid CAS: 69-72-7 EC: 200-712-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	16 mg/m <sup>3</sup>	Non-applicable

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Oral	25 mg/kg	Non-applicable	5 mg/kg	Non-applicable
	Dermal	28.5 mg/kg	Non-applicable	5.7 mg/kg	Non-applicable
	Inhalation	40.55 mg/m <sup>3</sup>	Non-applicable	8.11 mg/m <sup>3</sup>	Non-applicable
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	Oral	Non-applicable	Non-applicable	0.526 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) CAS: 113930-69-1 EC: 500-302-7	Oral	Non-applicable	Non-applicable	0.167 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0.167 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0.58 mg/m <sup>3</sup>	Non-applicable
Salicylic acid CAS: 69-72-7 EC: 200-712-3	Oral	4 mg/kg	Non-applicable	1 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>

**PNEC:**

Identification				
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	STP	39 mg/L	Fresh water	1 mg/L
	Soil	0.456 mg/kg	Marine water	0.1 mg/L
	Intermittent	2.3 mg/L	Sediment (Fresh water)	5.27 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.527 mg/kg
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	STP	3.18 mg/L	Fresh water	0.06 mg/L
	Soil	1.121 mg/kg	Marine water	0.006 mg/L
	Intermittent	0.23 mg/L	Sediment (Fresh water)	5.784 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.578 mg/kg
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	STP	10 mg/L	Fresh water	0.094 mg/L
	Soil	0.045 mg/kg	Marine water	0.0094 mg/L
	Intermittent	0.152 mg/L	Sediment (Fresh water)	0.43 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.043 mg/kg
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) CAS: 113930-69-1 EC: 500-302-7	STP	8.889 mg/L	Fresh water	0.00146 mg/L
	Soil	0.000502 mg/kg	Marine water	0.000146 mg/L
	Intermittent	0.0146 mg/L	Sediment (Fresh water)	0.00679 mg/kg
	Oral	3.33 g/kg	Sediment (Marine water)	0.000679 mg/kg
Salicylic acid CAS: 69-72-7 EC: 200-712-3	STP	162 mg/L	Fresh water	0.2 mg/L
	Soil	0.166 mg/kg	Marine water	0.02 mg/L
	Intermittent	1 mg/L	Sediment (Fresh water)	1.42 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.142 mg/kg



**8.2 Exposure controls:**

**A.- General security and hygiene measures in the work place**

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.



All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

**B.- Respiratory protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Filter mask for gases and vapours		EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.



**C.- Specific protection for the hands**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**





Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves		EN ISO 374-1:2016 EN 16523-1:2015 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"



**D.- Ocular and facial protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield		EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

**E.- Body protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks		EN 13034:2005+A1:2009 EN 168:2001 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk		EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

**F.- Additional emergency measures**

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**Volatile organic compounds:**

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	0 kg/m <sup>3</sup> (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C:	Liquid
Appearance:	Fluid
Colour:	Light yellow

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Odour:	Aminic
Odour threshold:	Non-applicable *
<b>Volatility:</b>	
Boiling point at atmospheric pressure:	226 °C
Vapour pressure at 20 °C:	5 Pa
Vapour pressure at 50 °C:	59.23 Pa (0.06 kPa)
Evaporation rate at 20 °C:	Non-applicable *
<b>Product description:</b>	
Density at 20 °C:	1029.4 kg/m <sup>3</sup>
Relative density at 20 °C:	1.05 - 1.07
Dynamic viscosity at 20 °C:	5799.7 cP
Kinematic viscosity at 20 °C:	5634.21 cSt
Kinematic viscosity at 40 °C:	200 cSt (ASTM D-445)
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Immiscible
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
<b>Flammability:</b>	
Flash Point:	105 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	380 °C
Lower flammability limit:	1.2 % Volume
Upper flammability limit:	13 % Volume
<b>Explosive:</b>	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *
<b>9.2 Other information:</b>	
Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**SECTION 10: STABILITY AND REACTIVITY (continued)**

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Avoid alkalis or strong bases

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Corrosivity/Irritability: Corrosive to the respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.  
IARC: Non-applicable
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Suspected to damage the foetus

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	Route	Toxicity	
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LD50 oral	500 mg/kg	Rat
	LD50 dermal	2500 mg/kg (ATEi)	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	LD50 oral	1030 mg/kg	Rat
	LD50 dermal	1100 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	LD50 oral	1090 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) CAS: 113930-69-1 EC: 500-302-7	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
Salicylic acid CAS: 69-72-7 EC: 200-712-3	LD50 oral	891 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L (4 h)	

**Acute Toxicity Estimate (ATE mix):**

ATE mix		Ingredient(s) of unknown toxicity
Oral	696.16 mg/kg (Calculation method)	0 %
Dermal	4400 mg/kg (Calculation method)	0 %
Inhalation	16.92 mg/L (4 h) (Calculation method)	0 %

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

Identification	Acute toxicity		Species	Genus
	Route	Toxicity		
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LC50	646 mg/L (48 h)	Leuciscus idus	Fish
	EC50	400 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	79 mg/L (3 h)	Scenedesmus subspicatus	Algae
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	LC50	110 mg/L (96 h)	Leuciscus idus	Fish
	EC50	388 mg/L (48 h)	N/A	Crustacean
	EC50	Non-applicable		
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	LC50	88 mg/L (96 h)	Oryzias latipes	Fish
	EC50	15 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	20 mg/L (72 h)	Selenastrum capricornutum	Algae
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) CAS: 113930-69-1 EC: 500-302-7	LC50	1 - 10 mg/L (96 h)		Fish
	EC50	1 - 10 mg/L		Crustacean
	EC50	1 - 10 mg/L		Algae

**12.2 Persistence and degradability:**

**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Identification	Degradability		Biodegradability	
	Parameter	Value	Parameter	Value
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	94 %
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	BOD5	Non-applicable	Concentration	7 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	8 %
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	BOD5	Non-applicable	Concentration	14 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	49 %

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential	
	Parameter	Value
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	BCF	0.3
	Pow Log	1.1
	Potential	Low
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	BCF	3
	Pow Log	0.18
	Potential	Low

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
	Parameter	Value	Parameter	Value
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	3.679E-2 N/m (25 °C)	Moist soil	Non-applicable
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	Koc	928	Henry	4.46E-4 Pa·m <sup>3</sup> /mol
	Conclusion	Low	Dry soil	No
	Surface tension	Non-applicable	Moist soil	No
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	Koc	1300	Henry	Non-applicable
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
Salicylic acid CAS: 69-72-7 EC: 200-712-3	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.444E-2 N/m (207.25 °C)	Moist soil	Non-applicable

**12.5 Results of PBT and vPvB assessment:**

Product fails to meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

Code	Description	Waste class (Regulation (EU) No 1357/2014)
20 01 27*	paint, inks, adhesives and resins containing hazardous substances	Dangerous

**Type of waste (Regulation (EU) No 1357/2014):**

HP14 Ecotoxic, HP6 Acute Toxicity, HP10 Toxic for reproduction, HP13 Sensitising, HP8 Corrosive

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC, The Waste Regulations 2011, 2011 No. 988). As under 15 01 (2014/955/EU) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

**Regulations related to waste management:**

## SECTION 13: DISPOSAL CONSIDERATIONS (continued)

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated  
Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

## SECTION 14: TRANSPORT INFORMATION

### Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:



- |   |  |
|---|--|
| <b>14.1 UN number:</b>  | UN2735   |
| <b>14.2 UN proper shipping name:</b>  | AMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine) |
| <b>14.3 Transport hazard class(es):</b>   | 8  |
| Labels:   | 8  |
| <b>14.4 Packing group:</b>  | II   |
| <b>14.5 Environmental hazards:</b>  | No   |
| <b>14.6 Special precautions for user</b>  |  |
| Special regulations:  | 274  |
| Tunnel restriction code:  | E  |
| Physico-Chemical properties:  | see section 9  |
| Limited quantities:   | 1 L  |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable   |

### Transport of dangerous goods by sea:

With regard to IMDG 39-18:



- |   |  |
|---|--|
| <b>14.1 UN number:</b>  | UN2735   |
| <b>14.2 UN proper shipping name:</b>  | AMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine) |
| <b>14.3 Transport hazard class(es):</b>   | 8  |
| Labels:   | 8  |
| <b>14.4 Packing group:</b>  | II   |
| <b>14.5 Environmental hazards:</b>  | No   |
| <b>14.6 Special precautions for user</b>  |  |
| Special regulations:  | 274  |
| EmS Codes:  | F-A, S-B   |
| Physico-Chemical properties:  | see section 9  |
| Limited quantities:   | 1 L  |
| Segregation group:  | SGG18  |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable   |

### Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:



## SECTION 14: TRANSPORT INFORMATION (continued)



<b>14.1 UN number:</b>	UN2735
<b>14.2 UN proper shipping name:</b>	AMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
<b>14.3 Transport hazard class(es):</b>	8
Labels:	8
<b>14.4 Packing group:</b>	II
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Physico-Chemical properties:	see section 9
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b>	Non-applicable

## SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains benzyl alcohol.

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: benzyl alcohol (Product-type 6) ; Salicylic acid (Product-type 2, 3, 4)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

#### Seveso III:

Non-applicable

#### Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

#### Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

#### Other legislation:

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009), SI 2009 No 1348

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011, 2011 No. 1885

Control of Substances Hazardous to Health Regulations 2002 (as amended)

EH40/2005 Workplace exposure limits

The Waste Regulations 2011, 2011 No. 988

### 15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

## SECTION 16: OTHER INFORMATION

### Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

### Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

### Texts of the legislative phrases mentioned in section 2:

**SECTION 16: OTHER INFORMATION (continued)**

H314: Causes severe skin burns and eye damage  
H318: Causes serious eye damage  
H317: May cause an allergic skin reaction  
H412: Harmful to aquatic life with long lasting effects  
H361d: Suspected to damage the foetus  
H302+H332: Harmful if swallowed or if inhaled

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Acute Tox. 4: H302 - Harmful if swallowed  
Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin  
Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled  
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects  
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects  
Eye Dam. 1: H318 - Causes serious eye damage  
Repr. 2: H361d - Suspected to damage the foetus  
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage  
Skin Sens. 1: H317 - May cause an allergic skin reaction  
Skin Sens. 1B: H317 - May cause an allergic skin reaction

**Classification procedure:**

Skin Corr. 1B: Calculation method  
Eye Dam. 1: Calculation method  
Skin Sens. 1B: Calculation method  
Aquatic Chronic 3: Calculation method  
Repr. 2: Calculation method  
Acute Tox. 4: Calculation method

**Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol-water partition coefficient  
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.