

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

- 1.1 Product identifier:** E600+
Other means of identification:
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Adhesive for construction
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:**
Fasteners Direct Global Ltd
20 Mansel Drive, Warkworth,
Auckland 0981
sales@fdgnz.com
0800 555 464
- 1.4 Emergency telephone number:** +44 (0) 800 555 464

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
GB CLP Regulation:
Classification of this product has been carried out in accordance with GB CLP Regulation.
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:**
GB CLP Regulation:
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:**
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection.
P302+P350: IF ON SKIN: Gently wash with plenty of soap and 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.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P501: Dispose of the contents and/or its container in line with regulations on dangerous waste or packaging and waste packaging respectively.
- Supplementary information:**
EUH205: Contains epoxy constituents. May produce an allergic reaction.
- Substances that contribute to the classification**
Bis-[4-(2,3-epoxipropoxy)phenyl]propane; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol; Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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Version: 2 (Replaced 1)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of additives, pigments and resins

Components:

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 1675-54-3	Bis-[4-(2,3-epoxipropoxy)phenyl]propane Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	25 - <50 %
CAS: 9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol Aquatic Chronic 2: H411; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	10 - <15 %
CAS: 933999-84-9	Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	1 - <10 %

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

Other information:

Identification	Specific concentration limit
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3	% (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 does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or 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:

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:

Suitable extinguishing media:

SECTION 5: FIREFIGHTING MEASURES (continued)

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.

Unsuitable extinguishing media:

Non-applicable

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,...).

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:

For non-emergency personnel:

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 spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

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.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

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

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 on general occupational hygiene

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

SECTION 7: HANDLING AND STORAGE (continued)

Store in a cool, dry, well-ventilated location

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:

There are no applicable occupational exposure limits for the substances contained in the product

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0.75 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4.93 mg/m³	Non-applicable
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol CAS: 9003-36-5 EC: 500-006-8	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/m³	Non-applicable
Reaction products of hexane-1,6-diol with 2-(chloromethyl) oxirane CAS: 933999-84-9 EC: 618-939-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	6 mg/kg	Non-applicable
	Inhalation	10.57 mg/m³	Non-applicable	10.57 mg/m³	0.44 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	Oral	Non-applicable	Non-applicable	0.5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0.0893 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0.87 mg/m³	Non-applicable
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol CAS: 9003-36-5 EC: 500-006-8	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/m³	Non-applicable
Reaction products of hexane-1,6-diol with 2-(chloromethyl) oxirane CAS: 933999-84-9 EC: 618-939-5	Oral	1.5 mg/kg	Non-applicable	1.5 mg/kg	Non-applicable
	Dermal	1.7 mg/kg	Non-applicable	3 mg/kg	Non-applicable
	Inhalation	5.29 mg/m³	Non-applicable	5.29 mg/m³	0.27 mg/m³

PNEC:

Identification					
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	STP	10 mg/L	Fresh water	0.006 mg/L	
	Soil	0.065 mg/kg	Marine water	0.001 mg/L	
	Intermittent	0.018 mg/L	Sediment (Fresh water)	0.341 mg/kg	
	Oral	0.011 g/kg	Sediment (Marine water)	0.034 mg/kg	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol CAS: 9003-36-5 EC: 500-006-8	STP	10 mg/L	Fresh water	0.003 mg/L	
	Soil	0.237 mg/kg	Marine water	0 mg/L	
	Intermittent	0.025 mg/L	Sediment (Fresh water)	0.294 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0.029 mg/kg	

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Reaction products of hexane-1,6-diol with 2-(chloromethyl) oxirane	STP	1 mg/L	Fresh water	0.011 mg/L
CAS: 933999-84-9	Soil	0.223 mg/kg	Marine water	0.001 mg/L
EC: 618-939-5	Intermittent	0.115 mg/L	Sediment (Fresh water)	0.283 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.028 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<UKCA marking>>. 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	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	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	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 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018

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

D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	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	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:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

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:	Paste
Colour:	Red
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	207 °C
Vapour pressure at 20 °C:	33 Pa
Vapour pressure at 50 °C:	245.91 Pa (0.25 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	1.5 kg/m ³
Relative density at 20 °C:	Non-applicable *
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20.5 mm ² /s
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:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	392 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Particle characteristics:

Median equivalent diameter:	Non-applicable
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9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *

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

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Heat of combustion: Non-applicable *

Aerosols-total percentage (by mass) of flammable components: Non-applicable *

Other safety characteristics:

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 indicated 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	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Not applicable	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 (CO₂), 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 hazardous 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, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. 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):

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- **Carcinogenicity:** Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
IARC: Bis-[4-(2,3-epoxipropoxy)phenyl]propane (3); C.I.Solvent Red 24 (3)
- **Mutagenicity:** Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous 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 hazardous 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 hazardous with sensitising effects. For more information see section 3.
- **Skin:** 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 hazardous 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 hazardous 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 hazardous 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 hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane CAS: 933999-84-9	LD50 oral	3010 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol CAS: 9003-36-5	LD50 oral	>5000 mg/kg	
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3	LD50 oral	>5000 mg/kg	
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3	LC50	2 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	1.7 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	9.4 mg/L (72 h)	Scenedesmus subspicatus	Algae
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol CAS: 9003-36-5	LC50	>1 - 10 mg/L (96 h)		Fish
	EC50	>1 - 10 mg/L (48 h)		Crustacean
	EC50	>1 - 10 mg/L (72 h)		Algae
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane CAS: 933999-84-9	LC50	30 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	39 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

Chronic toxicity:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3	NOEC	Non-applicable		
	NOEC	0.3 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	5 %
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane CAS: 933999-84-9	BOD5	Non-applicable	Concentration	2 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	47 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3	BCF	31
	Pow Log	3
	Potential	Moderate
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane CAS: 933999-84-9	BCF	4
	Pow Log	0.82
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Bis-[4-(2,3-epoxipropoxy)phenyl]propane CAS: 1675-54-3	Koc	450	Henry	Non-applicable
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane CAS: 933999-84-9	Koc	962	Henry	Non-applicable
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	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
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances	Dangerous

Type of waste:

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 The Waste Regulations 2011, 2011 No. 988. As under 15 01 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. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

UK legislation: The Waste Regulations 2011.

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis-[4-(2,3-epoxipropoxy)phenyl]propane)
- 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**
- Tunnel restriction code: -
- Physico-Chemical properties: see section 9
- Limited quantities: 5 L
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis-[4-(2,3-epoxipropoxy)phenyl]propane)
- 14.3 Transport hazard class(es):** 9
- Labels:** 9
- 14.4 Packing group:** III
- 14.5 Marine pollutant:** Yes
- 14.6 Special precautions for user**
- 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
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2023:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis-[4-(2,3-epoxipropoxy)phenyl]propane)
- 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:

- Substances listed in UK candidate list of substances of very high concern (SVHCs): Non-applicable
- Substances listed in UK REACH Authorisation List (Annex 14): Non-applicable

The Control of Major Accident Hazards Regulations 2015:

SECTION 15: REGULATORY INFORMATION (continued)

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

Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK 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.

Contains Octamethylcyclotetrasiloxane, Decamethylcyclopentasiloxane. 1. | Shall not be placed on the market in wash-off cosmetic products in a concentration equal to or greater than 0,1 % by weight of either substance, after 31 January 2020. | 2. | For the purposes of this entry, "wash-off cosmetic products" means cosmetic products as defined in Article 2(1)(a) of Regulation (EC) No 1223/2009 that, under normal conditions of use, are washed off with water after application.'

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 REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.

Control of Substances Hazardous to Health Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

Texts of the legislative phrases mentioned in section 2:

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

GB CLP Regulation:

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.

Skin Irrit. 2: H315 - Causes skin irritation.

Skin Sens. 1: H317 - May cause an allergic skin reaction.

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:

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:

SECTION 16: OTHER INFORMATION (continued)

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: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

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

- 1.1 Product identifier:** E600+
Other means of identification:
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Adhesive for construction
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:**
Fasteners Direct Global Ltd
20 Mansel Drive, Warkworth,
Auckland 0981
sales@fdgnz.com
0800 555 464
- 1.4 Emergency telephone number:** +44 (0) 800 555 464

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
GB CLP Regulation:
Classification of this product has been carried out in accordance with GB CLP Regulation.
Acute Tox. 4: Acute toxicity if swallowed, Category 4, H302
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Skin Corr. 1B: Skin corrosion, Category 1B, H314
Skin Sens. 1: Sensitisation, skin, Category 1, H317
- 2.2 Label elements:**
GB CLP Regulation:
Danger
- 

- Hazard statements:**
Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
- Precautionary statements:**
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection.
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501: Dispose of the contents and/or its container in line with regulations on dangerous waste or packaging and waste packaging respectively.
- Supplementary information:**
Contains m-phenylenebis(methylamine), Phenol, styrenated.
- 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:**

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Chemical description: Mixture composed of additives, pigments and resins

Components:

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 2579-20-6	1,3-Cyclohexanedimethanamine Acute Tox. 4: H302+H312; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Corr. 1A: H314 - Danger	25 - <50 %
CAS: 61788-44-1	Phenol, styrenated Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Warning	1 - <10 %
CAS: 69-72-7	Salicylic acid Acute Tox. 4: H302; Eye Dam. 1: H318; Repr. 2: H361d - Danger	1 - <10 %
CAS: 1477-55-0	m-phenylenebis(methylamine) Acute Tox. 4: H302+H332; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1B: H317; EUH071 - Danger	1 - <10 %

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:

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:

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:

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:

Suitable 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.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

SECTION 5: FIREFIGHTING MEASURES (continued)

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,...).

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:

For non-emergency personnel:

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 spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

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.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

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

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 on general occupational hygiene

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

Store in a cool, dry, well-ventilated location

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):

SECTION 7: HANDLING AND STORAGE (continued)

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:

There are no applicable occupational exposure limits for the substances contained in the product

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
1,3-Cyclohexanedimethanamine CAS: 2579-20-6 EC: 219-941-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	25.2 mg/kg	Non-applicable	0.1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	0.00947 mg/m³
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	21 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	74 mg/m³	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	2.3 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	5 mg/m³	5 mg/m³
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0.33 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1.2 mg/m³	0.2 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	Oral	Non-applicable	Non-applicable	7.5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	7.5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	13.1 mg/m³	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/m³	Non-applicable

PNEC:

Identification					
1,3-Cyclohexanedimethanamine CAS: 2579-20-6 EC: 219-941-5	STP	10 mg/L	Fresh water	0.033 mg/L	
	Soil	0.024 mg/kg	Marine water	0.003 mg/L	
	Intermittent	0.331 mg/L	Sediment (Fresh water)	0.218 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0.022 mg/kg	
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	STP	36.2 mg/L	Fresh water	0.004 mg/L	
	Soil	0.0473 mg/kg	Marine water	0.0004 mg/L	
	Intermittent	0.046 mg/L	Sediment (Fresh water)	0.248 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0.0248 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	
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	STP	10 mg/L	Fresh water	0.094 mg/L	
	Soil	2.44 mg/kg	Marine water	0.009 mg/L	
	Intermittent	0.152 mg/L	Sediment (Fresh water)	12.4 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	1.24 mg/kg	

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<UKCA marking>>. 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	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	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	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Neoprene)	Replace the gloves at any sign of deterioration.

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

D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Face shield	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk	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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Paste
Colour:	Beige
Odour:	Ammoniacal
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	241 °C
Vapour pressure at 20 °C:	25 Pa
Vapour pressure at 50 °C:	170.93 Pa (0.17 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	Non-applicable *
Relative density at 20 °C:	1.5
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20.5 mm ² /s
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:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	540 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Particle characteristics:

Median equivalent diameter:	Non-applicable
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9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

Other safety characteristics:

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 indicated 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	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 (CO₂), 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 : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper 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 hazardous 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 hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous 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 hazardous with sensitising effects. For more information see section 3.
- Skin: 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, as it does not contain substances classified as hazardous 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 hazardous 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 hazardous 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 hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
1,3-Cyclohexanedimethanamine CAS: 2579-20-6	LD50 oral	700 mg/kg	Rat
	LD50 dermal	1700 mg/kg	Rabbit
	LC50 inhalation	>20 mg/L	
Phenol, styrenated CAS: 61788-44-1	LD50 oral	>5000 mg/kg	
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
Salicylic acid CAS: 69-72-7	LD50 oral	891 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>5 mg/L	
m-phenylenebis(methylamine) CAS: 1477-55-0	LD50 oral	1090 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	11 mg/L (ATEi)	

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

Acute toxicity:

Identification	Concentration	Species	Genus
1,3-Cyclohexanedimethanamine CAS: 2579-20-6	LC50 130 mg/L (96 h)	Leuciscus idus	Fish
	EC50 33 mg/L (48 h)	Daphnia magna	Crustacean
	EC50 30 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
Phenol, styrenated CAS: 61788-44-1	LC50 >1 - 10 mg/L (96 h)		Fish
	EC50 >1 - 10 mg/L (48 h)		Crustacean
	EC50 >1 - 10 mg/L (72 h)		Algae
m-phenylenebis(methylamine) CAS: 1477-55-0	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

Chronic toxicity:

Identification	Concentration	Species	Genus
m-phenylenebis(methylamine) CAS: 1477-55-0	NOEC Non-applicable		
	NOEC 4.7 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
1,3-Cyclohexanedimethanamine CAS: 2579-20-6	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	29 %
Phenol, styrenated CAS: 61788-44-1	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	7 %
m-phenylenebis(methylamine) CAS: 1477-55-0	BOD5	Non-applicable	Concentration	14 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	49 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
m-phenylenebis(methylamine) CAS: 1477-55-0	BCF	3
	Pow Log	0.18
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
1,3-Cyclohexanedimethanamine CAS: 2579-20-6	Koc	30	Henry	Non-applicable
	Conclusion	Very High	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
Salicylic acid CAS: 69-72-7	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
m-phenylenebis(methylamine) CAS: 1477-55-0	Koc	1300	Henry	Non-applicable
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	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
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances	Dangerous

Type of waste:

HP14 Ecotoxic, HP6 Acute Toxicity, HP8 Corrosive

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste Regulations 2011, 2011 No. 988. As under 15 01 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. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

UK legislation: The Waste Regulations 2011.

SECTION 14: TRANSPORT INFORMATION

SECTION 14: TRANSPORT INFORMATION (continued)

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:



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

Transport of dangerous goods by sea:

With regard to IMDG 40-20:



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

Transport of dangerous goods by air:

With regard to IATA/ICAO 2023:



- | | |
|---|--|
| 14.1 UN number: | UN2735 |
| 14.2 UN proper shipping name: | AMINES, LIQUID, CORROSIVE, N.O.S. (1,3-Cyclohexanedimethanamine) |
| 14.3 Transport hazard class(es): | 8 |
| Labels: | 8 |
| 14.4 Packing group: | II |
| 14.5 Environmental hazards: | No |
| 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:

- Substances listed in UK candidate list of substances of very high concern (SVHCs): Non-applicable
- Substances listed in UK REACH Authorisation List (Annex 14): Non-applicable

The Control of Major Accident Hazards Regulations 2015:

Non-applicable

SECTION 15: REGULATORY INFORMATION (continued)

Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK 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 REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.

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

EH40/2005 Workplace exposure limits.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

Texts of the legislative phrases mentioned in section 2:

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

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

GB CLP Regulation:

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.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Repr. 2: H361d - Suspected of damaging the unborn child.

Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Skin Irrit. 2: H315 - Causes skin irritation.

Skin Sens. 1A: H317 - May cause an allergic skin reaction.

Skin Sens. 1B: H317 - May cause an allergic skin reaction.

Classification procedure:

Acute Tox. 4: Calculation method

Skin Corr. 1B: Calculation method

Skin Sens. 1: Calculation method

Aquatic Chronic 3: Calculation method

Advice related to training:

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:

SECTION 16: OTHER INFORMATION (continued)

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: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer