82-94 - PRO GYP BASE KIT



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

1.1 Product identifier: 82-94 - PRO GYP BASE KIT

Other means of identification:

Not relevant

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

Relevant uses (Professional users): Coating for facades
For Professional users 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:

Palace Chemicals Ltd
Speke Hall Industrial Estate
L24 1YA Liverpool - United Kingdom
UK Poisons information - contact NHS 111

1.4 Emergency telephone number: 0151 486 6101

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):

Classification of this product has been carried out in accordance with GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567).
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Eye Dam. 1: Serious eye damage, Category 1, H318
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

2.2 Label elements:

GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):

Danger



Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.

Precautionary statements:

P261: Avoid breathing vapours
P264: Wash thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
P302+P352: IF ON SKIN: 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.
P310: Immediately call a POISON CENTER/doctor.
P501: Dispose of the contents and/or its container in line with regulations on dangerous waste or packaging and waste packaging respectively.

Supplementary information:

EUH204: Contains isocyanates. May produce an allergic reaction.
EUH205: Contains epoxy constituents. May produce an allergic reaction.
Contains reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700 < MW < 1100), Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).

Substances that contribute to the classification

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SECTION 2: HAZARDS IDENTIFICATION (continued)

Decanedioic acid, compds. with 1,3- benzenedimethanamine-bisphenol A-bisphenol A diglycidyl ether-diethylenetriamine glycidyl Ph ether reaction product epichlorohydrinformaldehyde-propylene; Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Additional Labelling:

As from 24 August 2023 adequate training is required before industrial or professional use.

2.3 Other hazards:

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Not relevant

3.2 Mixture:

Chemical description: Mixture composed of chemical products

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: 25068-38-6 EC: 500-033-5 REACH: Not relevant	**reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700 < MW < 1100)** Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	**10 - <25%**
CAS: 260549-92-6 EC: Not relevant REACH: Not relevant	**Decanedioic acid, compds. with 1,3- benzenedimethanamine-bisphenol A-bisphenol A diglycidyl ether-diethylenetriamine glycidyl Ph ether reaction product epichlorohydrinformaldehyde-propylene** Eye Dam. 1: H318 - Danger	**2.5 - <10%**
Not relevant CAS: 701-263-0 EC: 01- REACH: 2119454392-40-XXXX	**Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane** Aquatic Chronic 2: H411; Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Warning	**2.5 - <10%**
3101-60-8 CAS: 221-453-2 EC: 01- REACH: 2119959496-20-XXXX	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether** Aquatic Chronic 2: H411; Skin Sens. 1: H317 - Warning	**1 - <2.5%**
CAS: 55965-84-9 EC: Not relevant REACH: Not relevant	**Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** Acute Tox. 2: H310+H330; Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1C: H314; Skin Sens. 1A: H317; EUH071 - Danger	**<1%**

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

Other information:

Identification	M-factor	
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	Acute	100
	Chronic	100

Identification	Specific concentration limit
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	% (w/w) >=0.6: Skin Corr. 1C - H314 0.06<= % (w/w) <0.6: Skin Irrit. 2 - H315 % (w/w) >=0.6: Eye Dam. 1 - H318 0.06<= % (w/w) <0.6: Eye Irrit. 2 - H319 % (w/w) >=0.0015: Skin Sens. 1A - H317

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Not relevant	LD50 oral	64 mg/kg	
	LD50 dermal	87.12 mg/kg	
	LC50 inhalation vapour	1.433 mg/L *	

*Equivalent ATE value of the substance applicable to the exposure route of the product. For the ATE value associated with the exposure route of the substance, see section 11.

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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:

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:

Not relevant

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:

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. 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:

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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

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:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.
Spillages in water or sea:
Small spillages:
Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.
Large spillages:
If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

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.- Specific storage requirements

Minimum Temp.:	5 ºC
Maximum Temp.:	30 ºC
Maximum time:	12 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 assessed in the workplace:

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

DNEL (Workers):

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700 < MW < 1100)	Oral	Not available	Not available	Not available	Not available
CAS: 25068-38-6	Dermal	Not available	Not available	0.75 mg/kg	Not available
EC: 500-033-5	Inhalation	Not available	Not available	4.93 mg/m³	Not available
Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl) oxirane	Oral	Not available	Not available	Not available	Not available
CAS: Not available	Dermal	Not available	Not available	104.15 mg/kg	Not available
EC: 701-263-0	Inhalation	Not available	Not available	29.39 mg/m³	Not available
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Oral	Not available	Not available	Not available	Not available
CAS: 3101-60-8	Dermal	1 mg/kg	Not available	1 mg/kg	Not available
EC: 221-453-2	Inhalation	3.5 mg/m³	3.5 mg/m³	3.5 mg/m³	3.5 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700 < MW < 1100)	Oral	Not available	Not available	0.5 mg/kg	Not available
CAS: 25068-38-6	Dermal	Not available	Not available	0.0893 mg/kg	Not available
EC: 500-033-5	Inhalation	Not available	Not available	0.87 mg/m³	Not available
Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl) oxirane	Oral	Not available	Not available	6.25 mg/kg	Not available
CAS: Not available	Dermal	Not available	Not available	62.5 mg/kg	Not available
EC: 701-263-0	Inhalation	Not available	Not available	8.7 mg/m³	Not available
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Oral	Not available	Not available	Not available	Not available
CAS: 3101-60-8	Dermal	0.5 mg/kg	Not available	0.5 mg/kg	Not available
EC: 221-453-2	Inhalation	Not available	Not available	1.75 mg/m³	1.75 mg/m³

PNEC:

Identification				
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700 < MW < 1100)	STP	10 mg/L	Fresh water	0.006 mg/L
CAS: 25068-38-6	Soil	0.065 mg/kg	Marine water	0.001 mg/L
EC: 500-033-5	Intermittent	0.018 mg/L	Sediment (Fresh water)	0.341 mg/kg
	Oral	0.011 g/kg	Sediment (Marine water)	0.034 mg/kg
Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl) oxirane	STP	10 mg/L	Fresh water	0.003 mg/L
CAS: Not available	Soil	0.237 mg/kg	Marine water	0 mg/L
EC: 701-263-0	Intermittent	0.025 mg/L	Sediment (Fresh water)	0.294 mg/kg
	Oral	Not available	Sediment (Marine water)	0.029 mg/kg
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	STP	100 mg/L	Fresh water	0.0075 mg/L
CAS: 3101-60-8	Soil	11.4 mg/kg	Marine water	0.00075 mg/L
EC: 221-453-2	Intermittent	0.075 mg/L	Sediment (Fresh water)	33.54 mg/kg
	Oral	Not available	Sediment (Marine water)	3.354 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>> or <<CE 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.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

B.- Respiratory protection

Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours (Filter type: A)	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 ISO 21420:2020 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 20345:2022 y EN 13832-1:2019

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

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:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012:

V.O.C. (Supply): 0 % weight

V.O.C. density at 20 ºC: 0 kg/m³ (0 g/L)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

*Not available 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)

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Compact
Colour:	According to the markings on the package
Odour:	Mild
Odour threshold:	Not available *

Volatility:

Boiling point at atmospheric pressure:	105 ºC
Vapour pressure at 20 ºC:	2333 Pa
Vapour pressure at 50 ºC:	12294.39 Pa (12.29 kPa)
Evaporation rate at 20 ºC:	Not available *

Product description:

Density at 20 ºC:	1161.9 kg/m³
Relative density at 20 ºC:	1.162
Dynamic viscosity at 20 ºC:	Not available *
Kinematic viscosity at 20 ºC:	Not available *
Kinematic viscosity at 40 ºC:	>20.5 mm²/s
Concentration:	Not available *
pH:	Not available *
Relative vapour density at 20 ºC:	Not available *
Partition coefficient n-octanol/water 20 ºC:	Not available *
Solubility in water at 20 ºC:	Not available *
Solubility properties:	Not available *
Decomposition temperature:	Not available *
Melting point/freezing point:	Not available *

Flammability:

Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Not available *
Autoignition temperature:	Not available *
Lower flammability limit:	Not available *
Upper flammability limit:	Not available *

Particle characteristics:

Median equivalent diameter:	Not available *

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not available *
Oxidising properties:	Not available *
Corrosive to metals:	Not available *
Heat of combustion:	Not available *
Aerosols-total percentage (by mass) of flammable components:	Not available *

Other safety characteristics:

Surface tension at 20 ºC:	Not available *
Refraction index:	Not available *

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

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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 from Safety Data Sheet.

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	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_2), 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, however, it contains 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 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: Produces skin inflammation.
- 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: Not relevant
- 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:

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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:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700 < MW < 1100) CAS: 25068-38-6 EC: 500-033-5	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation dust	>5 mg/L	
Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane CAS: Not relevant EC: 701-263-0	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether CAS: 3101-60-8 EC: 221-453-2	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
Decanedioic acid, compds. with 1,3- benzenedimethanamine-bisphenol A-bisphenol A diglycidyl ether-diethylenetriamine glycidyl Ph ether reaction product epichlorohydrinformaldehyde-propylene CAS: 260549-92-6 EC: Not relevant	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Not relevant	LD50 oral	64 mg/kg	Rat
	LD50 dermal	87.12 mg/kg	Rabbit
	LC50 inhalation mist	0.33 mg/L	Rat

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 12: ECOLOGICAL INFORMATION

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

Harmful to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane CAS: Not relevant	LC50	2.54 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	2.55 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1.8 mg/L (72 h)	Selenastrum capricornutum	Algae
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether CAS: 3101-60-8	LC50	7.5 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	68 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	9 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	LC50	0.28 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 55965-84-9	EC50	0.16 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	0.027 mg/L (72 h)	Selenastrum capricornutum	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700 < MW < 1100)	NOEC	Not relevant		
CAS: 25068-38-6	NOEC	0.3 mg/L	Daphnia magna	Crustacean
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	NOEC	>0.001 - 0.01 mg/L		Fish
CAS: 55965-84-9	NOEC	>0.001 - 0.01 mg/L		Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700 < MW < 1100)	BOD5	Not relevant	Concentration	100 mg/L
CAS: 25068-38-6	COD	Not relevant	Period	28 days
EC: 500-033-5	BOD5/COD	Not relevant	% Biodegradable	0 %
Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl) oxirane	BOD5	Not relevant	Concentration	3 mg/L
CAS: Not relevant	COD	Not relevant	Period	28 days
EC: 701-263-0	BOD5/COD	Not relevant	% Biodegradable	0 %
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	BOD5	Not relevant	Concentration	5 mg/L
CAS: 3101-60-8	COD	Not relevant	Period	28 days
EC: 221-453-2	BOD5/COD	Not relevant	% Biodegradable	1.1 %
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	BOD5	Not relevant	Concentration	0.3 mg/L
CAS: 55965-84-9	COD	Not relevant	Period	29 days
EC: Not relevant	BOD5/COD	Not relevant	% Biodegradable	38.8 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700 < MW < 1100)	BCF	4
CAS: 25068-38-6	Pow Log	2.8
EC: 500-033-5	Potential	Low
Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl] phenoxy}methyl)oxirane	BCF	150
CAS: Not relevant	Pow Log	3.6
EC: 701-263-0	Potential	High
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	BCF	54
CAS: 55965-84-9	Pow Log	0.75
EC: Not relevant	Potential	Moderate

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Reaction mass of 2,2´-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2´-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl) oxirane	Koc	4460	Henry	Not relevant
CAS: Not relevant	Conclusion	Low	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Koc	755	Henry	Not relevant
CAS: 3101-60-8	Conclusion	Low	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Koc	Not relevant	Henry	5E-3 Pa·m³/mol
CAS: 55965-84-9	Conclusion	Not relevant	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	Hazardous

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 (England & Wales) 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-hazardous 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 (England & Wales) Regulations 2011.

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2025 and RID 2025:

14.1 UN number: Not relevant

14.2 UN proper shipping name: Not relevant

14.3 Transport hazard class(es): Not relevant

Labels: Not relevant

14.4 Packing group: Not relevant

14.5 Environmental hazards: No

14.6 Special precautions for user

Tunnel restriction code: Not relevant

Physico-Chemical properties: see section 9

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 42-24:

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SECTION 14: TRANSPORT INFORMATION (continued)

14.1	**UN number:**	Not relevant
14.2	**UN proper shipping name:**	Not relevant
14.3	**Transport hazard class(es):**	Not relevant
	Labels:	Not relevant
14.4	**Packing group:**	Not relevant
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	Not relevant
	EmS Codes:	
	Physico-Chemical properties:	see section 9
	Limited quantities:	Not relevant
	Segregation group:	Not relevant
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2026:

14.1	**UN number:**	Not relevant
14.2	**UN proper shipping name:**	Not relevant
14.3	**Transport hazard class(es):**	Not relevant
	Labels:	Not relevant
14.4	**Packing group:**	Not relevant
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:**	Not relevant

SECTION 15: REGULATORY INFORMATION

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

- Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction(CWC): Not relevant
- Prior Informed Consent (PIC) List: Not relevant
- Substances listed in UK candidate list of substances of very high concern (SVHCs): Not relevant
- Substances listed in UK REACH Authorisation List (Annex 14): Not relevant

The Control of Major Accident Hazards Regulations 2015:

Not relevant

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 more than 0.1 % of diisocyanates by weight. 1. Shall not be used as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 August 2023, unless:
(a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the employer or self-employed ensures that industrial or professional user(s) have successfully completed training on the safe use of diisocyanates prior to the use of the substance(s) or mixture(s).
2. Shall not be placed on the market as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 February 2022, unless:
(a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the supplier ensures that the recipient of the substance(s) or mixture(s) is provided with information on the requirements referred to in point (b) of paragraph 1 and the following statement is placed on the packaging, in a manner that is visibly distinct from the rest of the label information: "As from 24 August 2023 adequate training is required before industrial or professional use".
3. For the purpose of this entry "industrial and professional user(s)" means any worker or self-employed worker handling

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SECTION 15: REGULATORY INFORMATION (continued)

diisocyanates on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) or supervising these tasks.
4. The training referred to in point (b) of paragraph 1 shall include the instructions for the control of dermal and inhalation exposure to diisocyanates at the workplace without prejudice to any national occupational exposure limit value or other appropriate risk management measures at national level. Such training shall be conducted by an expert on occupational safety and health with competence acquired by relevant vocational training. That training shall cover as a minimum:
(a) the training elements in point (a) of paragraph 5 for all industrial and professional use(s).
(b) the training elements in points (a) and (b) of paragraph 5 for the following uses:
— handling open mixtures at ambient temperature (including foam tunnels)
— spraying in a ventilated booth
— application by roller
— application by brush
— application by dipping and pouring
— mechanical post treatment (e.g. cutting) of not fully cured articles which are not warm anymore
— cleaning and waste
— any other uses with similar exposure through the dermal and/or inhalation route
(c) the training elements in points (a), (b) and (c) of paragraph 5 for the following uses:
— handling incompletely cured articles (e.g. freshly cured, still warm)
— foundry applications
— maintenance and repair that needs access to equipment
— open handling of warm or hot formulations (> 45 °C)
— spraying in open air, with limited or only natural ventilation (includes large industry working halls) and spraying with high energy (e.g. foams, elastomers)
— and any other uses with similar exposure through the dermal and/or inhalation route.
5. Training elements:
(a) general training, including on-line training, on:
— chemistry of diisocyanates
— toxicity hazards (including acute toxicity)
— exposure to diisocyanates
— occupational exposure limit values
— how sensitisation can develop
— odour as indication of hazard
— importance of volatility for risk
— viscosity, temperature, and molecular weight of diisocyanates
— personal hygiene
— personal protective equipment needed, including practical instructions for its correct use and its limitations
— risk of dermal contact and inhalation exposure
— risk in relation to application process used
— skin and inhalation protection scheme
— ventilation
— cleaning, leakages, maintenance
— discarding empty packaging
— protection of bystanders
— identification of critical handling stages
— specific national code systems (if applicable)
— behaviour-based safety
— certification or documented proof that training has been successfully completed
(b) intermediate level training, including on-line training, on:
— additional behaviour-based aspects
— maintenance
— management of change
— evaluation of existing safety instructions
— risk in relation to application process used
— certification or documented proof that training has been successfully completed
(c) advanced training, including on-line training, on:
— any additional certification needed for the specific uses covered
— spraying outside a spraying booth
— open handling of hot or warm formulations (> 45 °C)
— certification or documented proof that training has been successfully completed
6. The training shall comply with the provisions set by the Member State in which the industrial or professional user(s) operate. Member States may implement or continue to apply their own national requirements for the use of the substance(s) or mixture (s), as long as the minimum requirements set out in paragraphs 4 and 5 are met.
7. The supplier referred to in point (b) of paragraph 2 shall ensure that the recipient is provided with training material and courses pursuant to paragraphs 4 and 5 in the official language(s) of the Member State(s) where the substance(s) or mixture(s)

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SECTION 15: REGULATORY INFORMATION (continued)

are supplied. The training shall take into consideration the specificity of the products supplied, including composition, packaging, and design.
8. The employer or self-employed shall document the successful completion of the training referred to in paragraphs 4 and 5. The training shall be renewed at least every five years.
9. Member States shall include in their reports pursuant to Article 117(1) the following information:
(a) any established training requirements and other risk management measures related to the industrial and professional uses of diisocyanates foreseen in national law
(b) the number of cases of reported and recognised occupational asthma and occupational respiratory and dermal diseases in relation to diisocyanates
(c) national exposure limits for diisocyanates, if there are any
(d) information about enforcement activities related to this restriction.
10. This restriction shall apply without prejudice to other Union legislation on the protection of safety and health of workers at the workplace.

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:

H317: May cause an allergic skin reaction.
H315: Causes skin irritation.
H318: Causes serious eye damage.
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 (UK S.I. 2019/720 and UK S.I. 2020/1567):

Acute Tox. 2: H310+H330 - Fatal in contact with skin or if inhaled.
Acute Tox. 3: H301 - Toxic if swallowed.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.

Classification procedure:

Skin Sens. 1A: Calculation method
Skin Irrit. 2: Calculation method
Eye Dam. 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:

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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

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The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at UK, 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.

- END OF SAFETY DATA SHEET -