SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND THE COMPANY

1.1 Product identifier

Product Name: Hy-Glaze Bund Coat - (Resin) Part A

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

Relevant uses: Resin. For professional users/industrial user only.
Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet

Company Name: Polycote UK LLP
Centre Point
Wolseley Road
Woburn Road Industrial Estate
Kempston
Beds
MK42 7EF
Telephone Number: 01234 846400
Emergency Contact Number: 111 (NHS England)
Email address: uksales@polycote.com

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.
Carc. 2: Carcinogenicity, Category 2, H351
Flam. Liq. 3: Flammable liquids, Category 3, H226
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

2.2 Label elements

Signal word(s): Warning

Hazard pictograms:

Hazard statements:
Carc. 2: H351 - Suspected of causing cancer (Inhalation).
Flam. Liq. 3: H226 - Flammable liquid and vapour.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Precautionary Statement:
P201: Obtain special instructions before use.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P370+P378: In case of fire: Use Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC) to extinguish.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P501: Dispose of the contents and/or its container in line with regulations on dangerous waste or packaging and waste packaging respectively.

Supplementary information: EUH211: Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Substances that contribute to the classification: 2-methoxy-1-methylethyl acetate; Titanium dioxide (aerodynamic diameter ≤ 10 µm)

2.3 Other hazards: Product does not meet PBT/vPvB criteria

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance:
Non-applicable

3.2. Mixtures:
Chemical description: Resin
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: 108-65-6	**2-methoxy-1-methylethyl acetate** Flam. Liq. 3: H226; STOT SE 3: H336 - Warning 	**10 - <25 %**
CAS: 13463-67-7	**Titanium dioxide (aerodynamic diameter ≤ 10 µm)** Carc. 2: H351 - Warning 	**10 - <25 %**
CAS: 77-99-6	**Propylidynetrimethanol** Repr. 2: H361fd - Warning 	**<1 %**

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:
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:	Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply,etc.) requiring immediate medical assistance.
By skin contact:	In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet
By eye contact:	This product does not contain substances classified as hazardous for eye contact. Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes.
By ingestion/aspiration:	In case of consumption, seek immediate medical assistance showing the SDS for the product.

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: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:	Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)
Unsuitable extinguishing media:	Water jet
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. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.
For emergency responders:	Wear protective equipment. Keep unprotected persons away. See section 8.
6.2. Environmental precautions:	This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.
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. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions
Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in The Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016 and with the minimum requirements for protecting the security and health of workers under the selection criteria of The Dangerous Substances and Explosive Atmospheres Regulations 2002, 2002 No. 2776. Consult section 10 for 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
It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

SECTION 7: HANDLING AND STORAGE (continued)

7.2 Conditions for safe storage, including any Incompatibilities:

A.- Technical measures for storage
Minimum Temp: 5 °C
Maximum Temp: 30 °C
Maximum time: 6 Months

B.- General conditions for storage
Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s)

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace:

EH40/2005 Workplace exposure limits, fourth edition, published 2020:

Identification	Occupational exposure limits		
2-methoxy-1-methylethyl acetate [1]	WEL (8h)	50 ppm	274 mg/m³
CAS: 108-65-6	WEL (15 min)	100 ppm	548 mg/m³
Titanium dioxide (aerodynamic diameter ≤ 10 µm)	WEL (8h)		4 mg/m³
CAS: 13463-67-7	WEL (15 min)		

[1] Likely absorption through the skin

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-methoxy-1-methylethyl acetate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 108-65-6	Dermal	Not relevant	Not relevant	796 mg/kg	Not relevant
EC: 203-603-9	Inhalation	Not relevant	550 mg/m³	275 mg/m³	Not relevant
Propylidynetrimethanol	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 77-99-6	Dermal	Not relevant	Not relevant	0.94 mg/kg	Not relevant
EC: 201-074-9	Inhalation	Not relevant	Not relevant	3.3 mg/m³	Not relevant

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-methoxy-1-methylethyl acetate	Oral	Not relevant	Not relevant	36 mg/kg	Not relevant
CAS: 108-65-6	Dermal	Not relevant	Not relevant	320 mg/kg	Not relevant
EC: 203-603-9	Inhalation	Not relevant	Not relevant	33 mg/m³	33 mg/m³
Propylidynetrimethanol	Oral	Not relevant	Not relevant	0.34 mg/kg	Not relevant
CAS: 77-99-6	Dermal	Not relevant	Not relevant	0.34 mg/kg	Not relevant
EC: 201-074-9	Inhalation	Not relevant	Not relevant	0.58 mg/m³	Not relevant

PNEC:

Identification				
2-methoxy-1-methylethyl acetate	STP	100 mg/L	Fresh water	0.635 mg/L
CAS: 108-65-6	Soil	0.29 mg/kg	Marine water	0.064 mg/L
EC: 203-603-9	Intermittent	6.35 mg/L	Sediment (Fresh water)	3.29 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.329 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.

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	NON-disposable chemical protective gloves	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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, with antistatic and fireproof properties	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	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

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

V.O.C. (Supply):	23.78 % weight
V.O.C. density at 20 °C:	319.79 kg/m³ (319.79 g/L)

SECTION 9: PHYSICAL & 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:	Viscous
Colour:	Several
Odour:	Solvent
Odour threshold:	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	146 °C
Vapour pressure at 20 °C:	370 Pa
Vapour pressure at 50 °C:	2304.52 Pa (2.3 kPa)
Evaporation rate at 20 °C:	Not relevant *

Product description:

Density at 20 ºC:	1345 kg/m³
Relative density at 20 °C:	1.345
Dynamic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 40 °C:	>20.5 mm²/s
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water 20 °C:	Not relevant *
Solubility in water at 20 °C:	Not relevant *
Solubility properties:	Immiscible
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

Flammability:

Flash Point:	~30 - 50 °C
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	292 °C
Lower flammability limit:	Not available
Upper flammability limit:	Not available

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES (continued)

Particle characteristics

Median equivalent diameter:	Non-applicable

9.2 Other information

Information with regard to physical hazard classes:

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

Other safety characteristics:

Surface tension at 20 °C	Not relevant *
Refraction index:	Not relevant *

*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 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	Risk of combustion	Avoid direct impact	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, as it does not contain substances classified as hazardous for consumption. 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.

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: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: 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.

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

- Carcinogenicity: Exposure to this product can cause cancer. For more specific information on the possible health effects see section 2.
- IARC: Titanium dioxide (aerodynamic diameter ≤ 10 µm) (2B); Talc (3); Polyethylene (3); Hydrocarbons, C9, aromatics (3); n-butyl acrylate (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. 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: 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.

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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

- Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.

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:

CAS 13463-67-7 Titanium dioxide (aerodynamic diameter ≤ 10 µm): The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
2-methoxy-1-methylethyl acetate	LD50 oral	8532 mg/kg	Rat
CAS: 108-65-6	LD50 dermal	>5000 mg/kg	Rat
	LC50 inhalation	30 mg/L (4 h)	Rat
Titanium dioxide (aerodynamic diameter ≤ 10 µm)	LD50 oral	10000 mg/kg	Rat
CAS: 13463-67-7	LD50 dermal	10000 mg/kg	Rabbit
	LC50 inhalation		

SECTION 12: ECOLOGICAL INFORMATION

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

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.

12.1 Toxicity

Acute toxicity:

Identification	Concentration		Species	Genus
2-methoxy-1-methylethyl acetate	LC50	161 mg/L (96 h)	Pimephales promelas	Fish
CAS: 108-65-6	EC50	481 mg/L (48 h)	Daphnia sp.	Crustacean
	EC50	Not relevant		

Chronic toxicity:

Identification	Concentration		Species	Genus
2-methoxy-1-methylethyl acetate	NOEC	47.5 mg/L	Oryzias latipes	Fish
CAS: 108-65-6	NOEC	100 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
2-methoxy-1-methylethyl acetate	BOD5	Not relevant	Concentration	785 mg/L
CAS: 108-65-6	COD	Not relevant	8 days	cellPeriodo TesteoConte nido
	BOD5/COD	Not relevant	% Biodegradable	100%

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
2-methoxy-1-methylethyl acetate	BCF	1
CAS: 108-65-6	Pow Log	0.43
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Propylidynetrimethanol	Koc	Not relevant	Henry	Not relevant
CAS: 77-99-6	Conclusion	Not relevant	Dry soil	Not relevant
	Surface tension	2.357E-2 N/m (246.93 °C)	Moist soil	Not relevant

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
20 01 27*	paint, inks, adhesives and resins containing hazardous substances	Hazardous

Type of waste:
HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

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 2023 and RID 2023:

14.1	**UN number:**	UN1866
14.2	**UN proper shipping name:**	RESIN SOLUTION
14.3	**Transport Hazard Class(es):**	3
	Label(s):	3
14.4	**Packing group:**	III
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Tunnel restriction code:	D/E
	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:**	Not relevant

Transport of dangerous goods by sea:
With regard to IMDG 41-22:

14.1	**UN number:**	UN1866
14.2	**UN proper shipping name:**	RESIN SOLUTION
14.3	**Transport Hazard Class(es):**	3
	Label(s):	3
14.4	**Packing group:**	III
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	955, 223
	EmS Codes:	F-E, S-E
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
	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 2024:

14.1	**UN number:**	UN1866
14.2	**UN proper shipping name:**	RESIN SOLUTION
14.3	**Transport Hazard Class(es):**	3
	Label(s):	3
14.4	**Packing group:**	III
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:
- 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

SECTION 15: REGULATORY INFORMATION (continued)

The Control of Major Accident Hazards Regulations 2015:

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

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. 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, "washoff 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.'

Occupational exposure to respirable crystalline silica must be controlled pursuant to Directive (EU) 2019/130.

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:
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer (Inhalation).
H226: Flammable liquid and vapour.

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:
Carc. 2: H351 - Suspected of causing cancer (Inhalation).
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Repr. 2: H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:
STOT SE 3: Calculation method
Carc. 2: Calculation method
Flam. Liq. 3: Calculation method (2.6.4.3)

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.

As from 24th August 2023, adequate training is required before industrial or professional use of this product.

Principal bibliographical sources:
http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:
ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 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 OR PREPARATION AND THE COMPANY

1.1 Product identifier

Product Name: Hy-Glaze Bund Coat - (Hardener) Part B

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

Relevant uses: Resin. For professional users/industrial user only.
Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet

Company Name: Polycote UK LLP
Centre Point
Wolseley Road
Woburn Road Industrial Estate
Kempston
Beds
MK42 7EF

Telephone Number: 01234 846400
Emergency Contact Number: 111 (NHS England)
Email address: uksales@polycote.com

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 inhalation toxicity, Category 4, H332
Eye Irrit. 2: Eye irritation, Category 2, H319
Flam. Liq. 3: Flammable liquids, Category 3, H226
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1: Sensitisation, skin, Category 1, H317
STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2 (Oral), H373
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335

2.2 Label elements

Signal word(s): Warning

Hazard pictograms:

Hazard statements:
Acute Tox. 4: H332 - Harmful if inhaled.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).
STOT SE 3: H335 - May cause respiratory irritation.

Precautionary Statement:
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378: In case of fire: Use Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC) to extinguish.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
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.

Substances that contribute to the classification: Hexamethylene diisocyanate, oligomers; Xylene
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

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance:
Non-applicable

3.2. Mixtures:
Chemical description: Isocyanate/s
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: 28182-81-2	**Hexamethylene diisocyanate, oligomers** Acute Tox. 4: H332; Skin Sens. 1: H317; STOT SE 3: H335 - Warning 	**75 - <100 %**

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification	Concentration
CAS: 1330-20-7	**Xylene** Acute Tox. 4: H312+H332; Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H335 - Danger 	**10 - <25 %**
CAS: 108-65-6	**2-methoxy-1-methylethyl acetate** Flam. Liq. 3: H226; STOT SE 3: H336 - Warning 	**10 - <25 %**

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

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
Xylene CAS: 1330-20-7	LD50 oral	Not relevant	
	LD50 dermal	1100 mg/kg (ATEi)	Rat
	LC50 inhalation	11 mg/L (ATEi)	
Hexamethylene diisocyanate, oligomers CAS: 28182-81-2	LD50 oral	Not relevant	
	LD50 dermal	Not relevant	
	LC50 inhalation	11 mg/L (ATEi)	

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

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

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

By ingestion/aspiration: 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: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

Unsuitable extinguishing media: Water jet

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. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form and also ensuring that all surfaces are connected to the ground.

SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

For emergency responders:	Wear protective equipment. Keep unprotected persons away. See section 8.
6.2. Environmental precautions:	It is recommended to avoid environmental spillage of both the product and its container.
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. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

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

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in The Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016 and with the minimum requirements for protecting the security and health of workers under the selection criteria of The Dangerous Substances and Explosive Atmospheres Regulations 2002, 2002 No. 2776. Consult section 10 for 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

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any Incompatibilities:

A.- Technical measures for storage

Minimum Temp: 5 °C
Maximum Temp: 30 °C
Maximum time: 6 Months

B.- General conditions for storage

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

7.3 Specific end use(s)

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace:

EH40/2005 Workplace exposure limits, fourth edition, published 2020:

Identification	Occupational exposure limits		
Xylene [(1)]	WEL (8h)	50 ppm	220 mg/m³
CAS: 1330-20-7	WEL (15 min)	100 ppm	441 mg/m³
2-methoxy-1-methylethyl acetate [(1)]	WEL (8h)	50 ppm	274 mg/m³
CAS: 108-65-6	WEL (15 min)	100 ppm	548 mg/m³

[(1)] Likely absorption through the skin

BIOLOGICAL MONITORING GUIDANCE VALUES (BMGVS) - EH40/2005 - Isocyanates (applies to HDI, IPDI, TDI and MDI): 1 µmol isocyanate-derived diamine/mol creatinine in urine. Sampling Time: At the end of the period of exposure.

Biological limit values:

BIOLOGICAL MONITORING GUIDANCE VALUES (BMGVS) - EH40/2005

Identification	NULL	NULL	NULL
Xylene CAS: 1330-20-7	1030 mg/g (NULL)	Methyl hippuric acid in urine	Post shift

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hexamethylene diisocyanate, oligomers	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 28182-81-2	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 931-274-8	Inhalation	Not relevant	1 mg/m³	Not relevant	0.5 mg/m³
Xylene	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 1330-20-7	Dermal	Not relevant	Not relevant	212 mg/kg	Not relevant
EC: 215-535-7	Inhalation	442 mg/m³	442 mg/m³	221 mg/m³	221 mg/m³
2-methoxy-1-methylethyl acetate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 108-65-6	Dermal	Not relevant	Not relevant	796 mg/kg	Not relevant
EC: 203-603-9	Inhalation	Not relevant	550 mg/m³	275 mg/m³	Not relevant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Xylene	Oral	Not relevant	Not relevant	12.5 mg/kg	Not relevant
CAS: 1330-20-7	Dermal	Not relevant	Not relevant	125 mg/kg	Not relevant
EC: 215-535-7	Inhalation	260 mg/m³	260 mg/m³	65.3 mg/m³	65.3 mg/m³
2-methoxy-1-methylethyl acetate	Oral	Not relevant	Not relevant	36 mg/kg	Not relevant
CAS: 108-65-6	Dermal	Not relevant	Not relevant	320 mg/kg	Not relevant
EC: 203-603-9	Inhalation	Not relevant	Not relevant	33 mg/m³	33 mg/m³

PNEC:

Identification				
Hexamethylene diisocyanate, oligomers	STP	88 mg/L	Fresh water	0.127 mg/L
CAS: 28182-81-2	Soil	53183 mg/kg	Marine water	0.013 mg/L
EC: 931-274-8	Intermittent	1.27 mg/L	Sediment (Fresh water)	266701 mg/kg
	Oral	Not relevant	Sediment (Marine water)	26670 mg/kg
Xylene	STP	6.58 mg/L	Fresh water	0.327 mg/L
CAS: 1330-20-7	Soil	2.31 mg/kg	Marine water	0.327 mg/L
EC: 215-535-7	Intermittent	0.327 mg/L	Sediment (Fresh water)	12.46 mg/kg
	Oral	Not relevant	Sediment (Marine water)	12.46 mg/kg
2-methoxy-1-methylethyl acetate	STP	100 mg/L	Fresh water	0.635 mg/L
CAS: 108-65-6	Soil	0.29 mg/kg	Marine water	0.064 mg/L
EC: 203-603-9	Intermittent	6.35 mg/L	Sediment (Fresh water)	3.29 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.329 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.

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: Linear low -density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material cannot 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
 Mandatory complete body protection	Antistatic and fireproof protective clothing	Limited protection against flames.
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	Replace boots at any sign of deterioration.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

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

V.O.C. (Supply):	24.9 % weight
V.O.C. density at 20 °C:	265.86 kg/m³ (265.86 g/L)

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:
For complete information see the product datasheet.

Appearance

Physical state at 20 °C	Liquid
Appearance:	Fluid
Colour:	Colourless
Odour:	Solvent
Odour threshold:	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	145 °C
Vapour pressure at 20 °C:	578 Pa
Vapour pressure at 50 °C:	3309.51 Pa (3.31 kPa)
Evaporation rate at 20 °C:	Not relevant *

Product description:

Density at 20 ºC:	1067.7 kg/m³
Relative density at 20 °C:	1.068
Dynamic viscosity at 20 °C:	175 cP
Kinematic viscosity at 20 °C:	107 mm²/s
Kinematic viscosity at 40 °C:	Not relevant *
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water 20 °C:	Not relevant *
Solubility in water at 20 °C:	Not relevant *
Solubility properties:	Immiscible
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

Flammability:

Flash Point:	38 °C
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	460 °C
Lower flammability limit:	1.1 % Volume
Upper flammability limit:	10.8% Volume

Particle characteristics

Median equivalent diameter:	Non-applicable

9.2 Other information
Information with regard to physical hazard classes:

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

Other safety characteristics:

Surface tension at 20 °C	Not relevant *
Refraction index:	Not relevant *

*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 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	Risk of combustion	Avoid direct impact	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, 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: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

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

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

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

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
- IARC: Xylene (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:

- Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

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

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- 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. However, it does 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
Xylene CAS: 1330-20-7	LD50 oral	2100 mg/kg	Rat
	LD50 dermal	1100 mg/kg (ATEi)	Rat
	LC50 inhalation	11 mg/L (ATEi)	
2-methoxy-1-methylethyl acetate CAS: 108-65-6	LD50 oral	8532 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	Rat
	LC50 inhalation	30 mg/L (4 h)	Rat
Hexamethylene diisocyanate, oligomers CAS: 28182-81-2	LD50 oral	5100 mg/kg	Rat
	LD50 dermal		
	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. 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.

SECTION 12: ECOLOGICAL INFORMATION (continued)

12.1 Toxicity
Acute toxicity:

Identification	Concentration		Species	Genus
Hexamethylene diisocyanate, oligomers	LC50	Not relevant		
CAS: 28182-81-2	EC50	Not relevant		
	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
Xylene	LC50	>10 - 100 mg/L (96 h)		Fish
CAS: 1330-20-7	EC50	>10 - 100 mg/L (48 h)		Crustacean
	EC50	>10 - 100 mg/L (72 h)		Algae
2-methoxy-1-methylethyl acetate	LC50	161 mg/L (96 h)	Pimephales promelas	Fish
CAS: 108-65-6	EC50	481 mg/L (48 h)	Daphnia sp.	Crustacean
	EC50	Not relevant		

Chronic toxicity:

Identification	Concentration		Species	Genus
Xylene	NOEC	1.3 mg/L	Oncorhynchus mykiss	Fish
CAS: 1330-20-7	NOEC	1.17 mg/L	Ceriodaphnia dubia	Crustacean
2-methoxy-1-methylethyl acetate	NOEC	47.5 mg/L	Oryzias latipes	Fish
CAS: 108-65-6	NOEC	100 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:
Substance-specific information:

Identification	Degradability		Biodegradability	
Xylene	BOD5	Not relevant	Concentration	Not relevant
CAS: 1330-20-7	COD	Not relevant	28 days	cellPeriodoTesteo Contenido
	BOD5/COD	Not relevant	% Biodegradable	88%
2-methoxy-1-methylethyl acetate	BOD5	Not relevant	Concentration	785 mg/L
CAS: 108-65-6	COD	Not relevant	8 days	cellPeriodoTesteo Contenido
	BOD5/COD	Not relevant	% Biodegradable	100%

12.3 Bioaccumulative potential:
Substance-specific information:

Identification	Bioaccumulation potential	
Xylene	BCF	9
CAS: 1330-20-7	Pow Log	2.77
	Potential	Low
2-methoxy-1-methylethyl acetate	BCF	1
CAS: 108-65-6	Pow Log	0.43
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Xylene	Koc	202	Henry	524.86 Pa·m³/mol
CAS: 1330-20-7	Conclusion	Moderate	Dry soil	Yes
	Surface tension	Not relevant	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:
Product does not meet PBT/vPvB criteria

12.6 Other adverse effects:
Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Code	Description	Waste class
20 01 27*	paint, inks, adhesives and resins containing hazardous substances	Hazardous

Type of waste:
HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, 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.

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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 2023 and RID 2023:

14.1	**UN number:**	UN1866
14.2	**UN proper shipping name:**	RESIN SOLUTION
14.3	**Transport Hazard Class(es):**	3
	Label(s):	3
14.4	**Packing group:**	III
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Tunnel restriction code:	D/E
	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:**	Not relevant

Transport of dangerous goods by sea:
With regard to IMDG 41-22:

14.1	**UN number:**	UN1866
14.2	**UN proper shipping name:**	RESIN SOLUTION
14.3	**Transport Hazard Class(es):**	3
	Label(s):	3
14.4	**Packing group:**	III
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	955, 223
	EmS Codes:	F-E, S-E
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
	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 2024:

14.1	**UN number:**	UN1866
14.2	**UN proper shipping name:**	RESIN SOLUTION
14.3	**Transport Hazard Class(es):**	3
	Label(s):	3
14.4	**Packing group:**	III
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:
- 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:

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

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 Hexamethylene diisocyanate, oligomers 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).

SECTION 15: REGULATORY INFORMATION (continued)

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 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) 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

SECTION 15: REGULATORY INFORMATION (continued)

(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.
H335: May cause respiratory irritation.
H315: Causes skin irritation.
H373: May cause damage to organs through prolonged or repeated exposure (Oral).
H332: Harmful if inhaled.
H226: Flammable liquid and vapour.
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:

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled.
Acute Tox. 4: H332 - Harmful if inhaled.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

Skin Sens. 1: Calculation method
STOT SE 3: Calculation method
Skin Irrit. 2: Calculation method
STOT RE 2: Calculation method
Acute Tox. 4: Calculation method
Flam. Liq. 3: Calculation method (2.6.4.3)
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.

As from 24th August 2023, adequate training is required before industrial or professional use of this product.

Principal bibliographical sources:

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

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 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