10721782 - ClassicBond Pro Reinforced Single Ply Sprayable PU Deck Adhesive 22L Canister

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

1.1 Product identifier: 10721782 - ClassicBond Pro Reinforced Single Ply Sprayable PU Deck Adhesive 22L Canister

Other means of identification:

Not relevant

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

Relevant uses (Professional users): Adhesive
For Professional users only.
Not for Consumer Use

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:

ClassicBond Pro
Sandswood House, Hillbottom Road, Sands Industrial Estate,
HP12 4HJ High Wycombe - Buckinghamshire - United Kingdom
Phone: +44 (0) 1494 448 792
enq@classicbond.co.uk
www.classicbond.co.uk

1.4 Emergency telephone number: +44 (0) 1494 448792 (Monday-Thursday 8.30am-5.30pm, 9.30am - 4.30pm Friday GMT)

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).
Aerosol 1: Flammable aerosols, Category 1, H222
Aerosol 1: Pressurised container: May burst if heated., H229
Carc. 2: Carcinogenicity, Category 2, H351
Eye Irrit. 2: Eye irritation, Category 2, H319
Resp. Sens. 1: Sensitisation, respiratory, Category 1, H334
Skin Sens. 1: Sensitisation, skin, Category 1, H317

2.2 Label elements:

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

Danger

Hazard statements:

Aerosol 1: H222 - Extremely flammable aerosol.
Aerosol 1: H229 - Pressurised container: May burst if heated.
Carc. 2: H351 - Suspected of causing cancer.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1: H317 - May cause an allergic skin reaction.

Precautionary statements:

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SECTION 2: HAZARDS IDENTIFICATION (continued)

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Do not pierce or burn, even after use.
P261: Avoid breathing spray
P264: Wash thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.
P284: Wear respiratory protection.
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.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P405: Store locked up.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
P501: Dispose of the contents and/or its container in line with regulations on dangerous waste or packaging and waste packaging respectively.

Supplementary information:

EUH066: Repeated exposure may cause skin dryness or cracking.
EUH204: Contains isocyanates. May produce an allergic reaction.

Substances that contribute to the classification

Methylenediphenyl diisocyanate (CAS: 26447-40-5)

Additional Labelling:

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

Additional labeling:

RCH004a Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
RCH004b Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
RCH004c This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

2.3 Other hazards:

Product does not meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Not relevant

3.2 Mixture:

Chemical description: Mixture of substances

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: 115-10-6 EC: 204-065-8 REACH: 01-2119472128-37-XXXX	**Dimethyl ether** Flam. Gas 1A: H220; Press. Gas: H280 - Danger 	**20 - <30 %**
CAS: 141-78-6 EC: 205-500-4 REACH: 01-2119475103-46-XXXX	**Ethyl acetate** Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger 	**10 - <20 %**
CAS: 26447-40-5 EC: 247-714-0 REACH: 01-2119457015-45-XXXX	**Methylenediphenyl diisocyanate** Acute Tox. 4: H332; Carc. 2: H351; Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT RE 2: H373; STOT SE 3: H335 - Danger 	**1 - <5 %**

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification	Concentration
CAS: 4083-64-1 EC: 223-810-8 REACH: 01-2119980050-47-XXXX	**4-isocyanatosulphonyltoluene** Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. 2: H315; STOT SE 3: H335; EUH014 - Danger 	**0.1 - <1 %**

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

Other information:

Identification	Specific concentration limit
Methylenediphenyl diisocyanate CAS: 26447-40-5	% (w/w) >=5: Skin Irrit. 2 - H315 % (w/w) >=5: Eye Irrit. 2 - H319 % (w/w) >=0.1: Resp. Sens. 1 - H334 % (w/w) >=5: STOT SE 3 - H335
4-isocyanatosulphonyltoluene CAS: 4083-64-1	% (w/w) >=5: Skin Irrit. 2 - H315 % (w/w) >=5: Eye Irrit. 2 - H319 % (w/w) >=5: STOT SE 3 - H335

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
Methylenediphenyl diisocyanate CAS: 26447-40-5 EC: 247-714-0	LD50 oral	Not relevant	
	LD50 dermal	Not relevant	
	LC50 inhalation mist	Not relevant	

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: FIREFIGHTING 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

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SECTION 5: FIREFIGHTING MEASURES (continued)

5.2 Special hazards arising from the substance or mixture:

Contains substances that react violently with water.

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:

AVOID CONTACT WITH WATER. Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those who do not have protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

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:

DO NOT USE WATER TO CLEAN.

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

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

C.- Technical recommendations 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)

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SECTION 7: HANDLING AND STORAGE (continued)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

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

Other information:

Storage Temperature: Between 5°C and 25°C

7.3 Specific end use(s):

See Section 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

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

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

Identification	Occupational exposure limits		
Dimethyl ether	WEL (8h)	400 ppm	766 mg/m³
CAS: 115-10-6	WEL (15 min)	500 ppm	958 mg/m³
Ethyl acetate	WEL (8h)	200 ppm	734 mg/m³
CAS: 141-78-6	WEL (15 min)	400 ppm	1468 mg/m³

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.

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dimethyl ether	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 115-10-6	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 204-065-8	Inhalation	Not relevant	Not relevant	1894 mg/m³	Not relevant
Ethyl acetate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 141-78-6	Dermal	Not relevant	Not relevant	63 mg/kg	Not relevant
EC: 205-500-4	Inhalation	1468 mg/m³	1468 mg/m³	734 mg/m³	734 mg/m³
Methylenediphenyl diisocyanate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 26447-40-5	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 247-714-0	Inhalation	Not relevant	0.1 mg/m³	Not relevant	0.05 mg/m³
4-isocyanatosulphonyltoluene	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 4083-64-1	Dermal	Not relevant	Not relevant	0.92 mg/kg	Not relevant
EC: 223-810-8	Inhalation	Not relevant	Not relevant	3.24 mg/m³	Not relevant

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dimethyl ether	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 115-10-6	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 204-065-8	Inhalation	Not relevant	Not relevant	471 mg/m³	Not relevant
Ethyl acetate	Oral	Not relevant	Not relevant	4.5 mg/kg	Not relevant
CAS: 141-78-6	Dermal	Not relevant	Not relevant	37 mg/kg	Not relevant
EC: 205-500-4	Inhalation	734 mg/m³	734 mg/m³	367 mg/m³	367 mg/m³
Methylenediphenyl diisocyanate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 26447-40-5	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 247-714-0	Inhalation	Not relevant	0.05 mg/m³	Not relevant	0.025 mg/m³

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
4-isocyanatosulphonyltoluene	Oral	Not relevant	Not relevant	0.46 mg/kg	Not relevant
CAS: 4083-64-1	Dermal	Not relevant	Not relevant	0.46 mg/kg	Not relevant
EC: 223-810-8	Inhalation	Not relevant	Not relevant	0.8 mg/m³	Not relevant

PNEC:

Identification				
Dimethyl ether	STP	160 mg/L	Fresh water	0.155 mg/L
CAS: 115-10-6	Soil	0.045 mg/kg	Marine water	0.016 mg/L
EC: 204-065-8	Intermittent	1.549 mg/L	Sediment (Fresh water)	0.681 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.069 mg/kg
Ethyl acetate	STP	650 mg/L	Fresh water	0.24 mg/L
CAS: 141-78-6	Soil	0.148 mg/kg	Marine water	0.024 mg/L
EC: 205-500-4	Intermittent	1.65 mg/L	Sediment (Fresh water)	1.15 mg/kg
	Oral	0.2 g/kg	Sediment (Marine water)	0.115 mg/kg
Methylenediphenyl diisocyanate	STP	1 mg/L	Fresh water	1 mg/L
CAS: 26447-40-5	Soil	1 mg/kg	Marine water	0.1 mg/L
EC: 247-714-0	Intermittent	10 mg/L	Sediment (Fresh water)	Not relevant
	Oral	Not relevant	Sediment (Marine water)	Not relevant
4-isocyanatosulphonyltoluene	STP	0.4 mg/L	Fresh water	0.03 mg/L
CAS: 4083-64-1	Soil	0.017 mg/kg	Marine water	0.003 mg/L
EC: 223-810-8	Intermittent	0.3 mg/L	Sediment (Fresh water)	0.172 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.017 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, vapours and particles (Filter type: AX)	Replace when an increase in resistence to breathing is observed and/or a smell or taste of the contaminant is detected.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.11 mm)	Replace the gloves at any sign of deterioration.

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

D.- Eye and face protection

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

E.- Body protection

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

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): 49.8 % weight

V.O.C. density at 20 ºC: Not relevant

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Aerosol
Appearance:	Not relevant *
Colour:	Not relevant *
Odour:	Characteristic
Odour threshold:	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	-24 ºC (Propellant)
Vapour pressure at 20 ºC:	Not relevant *
Vapour pressure at 50 ºC:	<300000 Pa (300 kPa)
Evaporation rate at 20 ºC:	Not relevant *

Product description:

Density at 20 ºC:	Not relevant *
Relative density at 20 ºC:	1.1
Dynamic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 40 ºC:	Not relevant *
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 ºC:	Not relevant *

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

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Partition coefficient n-octanol/water 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Not relevant *
Solubility properties:	Not relevant *
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *
Recipient pressure:	Not relevant *
Flammability:	
Flash Point:	-41 ºC (Propellant)
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	226 ºC (Propellant)
Lower flammability limit:	1.1 % Volume
Upper flammability limit:	26.2 % Volume
Particle characteristics:	
Median equivalent diameter:	Not relevant *

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 ºC:	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
Precaution	Precaution	Risk of combustion	Avoid direct impact	Precaution

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.

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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

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

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. However, it does 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. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. 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. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Produces eye damage after contact.

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: 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: Prolonged exposure can result in specific respiratory hypersensitivity.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

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

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

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

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- Skin: Repeated exposure may cause skin dryness or cracking

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
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation gases	164000 ppm (4 h)	Rat
	LC50 inhalation mist	164000 ppm (4 h)	

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
Ethyl acetate CAS: 141-78-6 EC: 205-500-4	LD50 oral	4100 mg/kg	Rat
	LD50 dermal	20000 mg/kg	Rabbit
	LC50 inhalation vapour	>20 mg/L	
Methylenediphenyl diisocyanate CAS: 26447-40-5 EC: 247-714-0	LD50 oral	5100 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rabbit
	LC50 inhalation dust	1.5 mg/L	
4-isocyanatosulphonyltoluene CAS: 4083-64-1 EC: 223-810-8	LD50 oral	2600 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	0 %
Dermal	>2000 mg/kg (Calculation method)	0 %
LC50 inhalation mist	60 mg/L (4 h) (Calculation method)	0 %

Only the physical form mist can occur during any reasonably expected use of the product, including when the product is used to produce a new product.

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
Ethyl acetate CAS: 141-78-6	LC50	230 mg/L (96 h)	Pimephales promelas	Fish
	EC50	717 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	3300 mg/L (48 h)	Scenedesmus subspicatus	Algae
4-isocyanatosulphonyltoluene CAS: 4083-64-1	LC50	597 mg/L (96 h)	Brachydanio rerio	Fish
	EC50	Not relevant		
	EC50	Not relevant		

Chronic toxicity:

Identification	Concentration		Species	Genus
Ethyl acetate	NOEC	9.65 mg/L	Pimephales promelas	Fish
CAS: 141-78-6	NOEC	2.4 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Ethyl acetate	BOD5	1.36 g O2/g	Concentration	100 mg/L
CAS: 141-78-6	COD	1.69 g O2/g	Period	14 days
EC: 205-500-4	BOD5/COD	0.8	% Biodegradable	83 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Ethyl acetate	BCF	30
CAS: 141-78-6	Pow Log	0.73
EC: 205-500-4	Potential	Moderate

12.4 Mobility in soil:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
Dimethyl ether	Koc	Not relevant	Henry	Not relevant
CAS: 115-10-6	Conclusion	Not relevant	Dry soil	Not relevant
	Surface tension	1.136E-2 N/m (25 ºC)	Moist soil	Not relevant
Ethyl acetate	Koc	59	Henry	13.58 Pa·m³/mol
CAS: 141-78-6	Conclusion	Very High	Dry soil	Yes
	Surface tension	2.324E-2 N/m (25 ºC)	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
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances	Hazardous

Type of waste:

HP3 Flammable, HP7 Carcinogenic, 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 2023 and RID 2023:

14.1	**UN number:**	UN3501
14.2	**UN proper shipping name:**	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (Dimethyl ether)
14.3	**Transport hazard class(es):**	2
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Tunnel restriction code:	B/D
	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 41-22:

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SECTION 14: TRANSPORT INFORMATION (continued)

14.1	**UN number:**	UN3501
14.2	**UN proper shipping name:**	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (Dimethyl ether)
14.3	**Transport hazard class(es):**	2.1
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	274, 362
	EmS Codes:	F-H, S-Q
	Physico-Chemical properties:	see section 9
	Limited quantities:	0
	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 2025:

14.1	**UN number:**	UN3501
14.2	**UN proper shipping name:**	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (Dimethyl ether)
14.3	**Transport hazard class(es):**	2.1
	Labels:	2.1
14.4	**Packing group:**	N/A
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
P3a	FLAMMABLE AEROSOLS	150	500

Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK REACH, etc ….):

Contains more than 0.1 % of Methylenediphenyl diisocyanate by weight. This product may not be distributed in its present form for first-time sale to the general public after 27th December 2010 unless the packaging contains protective gloves meeting the provisions of Regulation (EU) 2016/425.
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”.

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SECTION 15: REGULATORY INFORMATION (continued)

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.

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SECTION 15: REGULATORY INFORMATION (continued)

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.
The Aerosol Dispensers Regulations 2009
The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019: SCHEDULE 13 -Amendment of the Aerosol Dispensers Regulations 2009
The Product Safety and Metrology etc. (Amendment etc.) (UK(NI) Indication) (EU Exit) Regulations 2020

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:

H319: Causes serious eye irritation.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317: May cause an allergic skin reaction.
H351: Suspected of causing cancer.
H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated.

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. 4: H332 - Harmful if inhaled.
Carc. 2: H351 - Suspected of causing cancer.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Gas 1A: H220 - Extremely flammable gas.
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
Press. Gas: H280 - Contains gas under pressure, may explode if heated.
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

Eye Irrit. 2: Calculation method
Resp. Sens. 1: Calculation method
Skin Sens. 1: Calculation method
Carc. 2: Calculation method
Aerosol 1: Calculation method
Aerosol 1: Calculation method

Advice related to training:

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SECTION 16: OTHER INFORMATION (continued)

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

Principal bibliographical sources:

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

Abbreviations and acronyms:

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

- END OF SAFETY DATA SHEET -