SAFETY DATA SHEET

Proteus Pro-Cold® Plus

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Proteus Pro-Cold® Plus

Product no.

PCP15SGV1

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

Relevant identified uses of the substance or mixture

Paint
Restricted to professional users.

Use descriptors (UK REACH)

Sectors of use	**Description**
LCS "IS"	Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU 19	Building and construction work
Product category	**Description**
PC 9a	Coatings and Paints, Fillers, Putties, Thinners
Process category	**Description**
PROC 10	Roller application or brushing
Environmental release category	**Description**
ERC 5	Industrial use resulting in inclusion into or onto a matrix

EuPCS

PC-CON-5 / Construction chemicals

Uses advised against

Consumer uses: Private households (= general public = consumers)
Industrial spraying
Non industrial spraying

1.3. Details of the supplier of the safety data sheet

Company and address

Proteus Waterproofing Ltd
21a Sirdar Road, Brook Road Industrial Estate
SS6 7XF Rayleigh, Essex
England
+44 (0) 1268 777871 Office Mon-Fri 08:30-17:00 outside of these hours call emergency numbers
www.proteuswaterproofing.co.uk

E-mail

enquiries@proteuswaterproofing.co.uk

Revision

03/10/2025

SDS Version

1.0

1.4. Emergency telephone number

In emergency call NCEC +44 (0) 1865 407 333
Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)
General public:
England - Dial 111 to reach NHS 111 (24 hour service)
Scotland - Dial 111 to reach NHS 24 (24 hour service)
Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)
See section 4 “First aid measures”.

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Flam. Liq. 2; H225, Highly flammable liquid and vapour.
Asp. Tox. 1; H304, May be fatal if swallowed and enters airways.
Skin Irrit. 2; H315, Causes skin irritation.
Skin Sens. 1; H317, May cause an allergic skin reaction.
Eye Irrit. 2; H319, Causes serious eye irritation.
STOT SE 3; H335, May cause respiratory irritation.
STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

Hazard statement(s)

Highly flammable liquid and vapour. (H225)
May be fatal if swallowed and enters airways. (H304)
Causes skin irritation. (H315)
May cause an allergic skin reaction. (H317)
Causes serious eye irritation. (H319)
May cause respiratory irritation. (H335)
May cause damage to organs through prolonged or repeated exposure. (H373)
Harmful to aquatic life with long lasting effects. (H412)

Precautionary statement(s)

General

Not applicable.

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
Ground and bond container and receiving equipment. (P240)
Do not breathe vapour/mist. (P260)
Wash hands thoroughly after handling. (P264)
Use only outdoors or in a well-ventilated area. (P271)
Contaminated work clothing should not be allowed out of the workplace. (P272)
Avoid release to the environment. (P273)
Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Response

IF SWALLOWED: Immediately call a POISON CENTER/doctor. (P301+P310)
IF ON SKIN: Wash with plenty of water and soap. (P302+P352)
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. (P303+P361+P353)
IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Call a POISON CENTER/doctor if you feel unwell. (P312)
Get medical advice/attention if you feel unwell. (P314)
Do NOT induce vomiting. (P331)
If eye irritation persists: Get medical advice/attention. (P337+P313)
Take off contaminated clothing and wash it before reuse. (P362+P364)

Storage

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
Store in a well-ventilated place. Keep cool. (P403+P235)
Store locked up. (P405)

Disposal

Dispose of contents/container in accordance with local regulation. (P501)

Hazardous substances

Aliphantic Polyisocyanate
Xylene
reaction mass of ethylbenzene and xylene
HYDROCARBONS, C9, AROMATICS
hexamethylene-di-isocyanate

Additional labelling

EUH204, Contains isocyanates. May produce an allergic reaction.
As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

Personnel who work with isocyanates, isocyanate prepolymers or polyisocyanates should have a pre-placement medical examination and periodic examinations thereafter, including a pulmonary function test.

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Aliphantic Polyisocyanate	CAS No.: 28182-81-2 EC No.: 500-060-2 UK-REACH: Index No.:	25-40%	Skin Sens. 1, H317 Acute Tox. 4, H332 STOT SE 3, H335	
Xylene	CAS No.: 1330-20-7 EC No.: 215-535-7 UK-REACH: Index No.: 601-022-00-9	15-25%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312 Skin Irrit. 2, H315 Acute Tox. 4, H332 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412	[1]
2-methoxy-1-methylethyl acetate	CAS No.: 108-65-6 EC No.: 203-603-9 UK-REACH: Index No.: 607-195-00-7	3-5%	Flam. Liq. 3, H226 STOT SE 3, H336	[1]
reaction mass of ethylbenzene and xylene	CAS No.: EC No.: 905-588-0 UK-REACH:	3-5%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312	

	Index No.:		Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412	
propylene carbonate	CAS No.: 108-32-7 EC No.: 203-572-1 UK-REACH: Index No.: 607-194-00-1	3-5%	Eye Irrit. 2, H319	
HYDROCARBONS, C9, AROMATICS	CAS No.: 128601-23-0 EC No.: 918-668-5 UK-REACH: Index No.:	1-3%	EUH066 Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 2, H411	[15]
ethyl acetate	CAS No.: 141-78-6 EC No.: 205-500-4 UK-REACH: Index No.: 607-022-00-5	1-3%	EUH066 EUH401 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
Butyl ethanoate	CAS No.: 123-86-4 EC No.: 204-658-1 UK-REACH: Index No.: 607-025-00-1	<1%	EUH066 Flam. Liq. 3, H226 STOT SE 3, H336	
hexamethylene-di-isocyanate	CAS No.: 822-06-0 EC No.: 212-485-8 UK-REACH: Index No.: 615-011-00-1	<1%	EUH204 Acute Tox. 4, H302 (ATE: 746.00 mg/kg) Skin Irrit. 2, H315 Skin Sens. 1, H317 (SCL: 0.50 %) Eye Irrit. 2, H319 Acute Tox. 1, H330 Resp. Sens. 1, H334 (SCL: 0.50 %) STOT SE 3, H335	[3]
ethylbenzene	CAS No.: 100-41-4 EC No.: 202-849-4 UK-REACH: Index No.: 601-023-00-4	<0.1%	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Acute Tox. 4, H332 STOT RE 2, H373 Aquatic Chronic 3, H412	[1]
Quartz	CAS No.: 14808-60-7 EC No.: 238-878-4 UK-REACH: Index No.:	<0.05%	STOT RE 1, H372	
Dibutylbis(dodecylthio)stannane	CAS No.: 1185-81-5 EC No.: 214-688-7 UK-REACH: Index No.:	<0.05%	Acute Tox. 4, H312 (ATE: 1000.00 mg/kg) Skin Irrit. 2, H315 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 STOT RE 1, H372 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[4]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.
[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.
[4] Substance is listed in Annex I of the Prior Informed Consent Regulation (PIC, Regulation (EU) 649/2012).
[15] The classification as a carcinogen / mutagen will not be taken into account as the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7) (CLP, Annex VI, note P).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No action shall be taken involving any personal risk or without suitable training, evacuate immediate area of personnel not dealing with the emergency, keep them upwind and prevent further access, remove ignition sources and if inside building, ventilate area as well as possible.
In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.
Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER/doctor.
Do not induce vomiting! If vomiting occurs, keep head facing down so that vomit does not get into the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should therefore be kept under medical attention for at least 48 hours.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

4.2. Most important symptoms and effects, both acute and delayed

This product contains substances that can cause chemical pneumonia if swallowed. Symptoms of chemical pneumonia may appear after several hours.
Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.
Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned:
Get immediate medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
Anyone who developes chronic respiratory distress when working with isocyanates should be removed from exposure and examined by a physician. Further exposure must be avoided if a sensitivity to isocyanates or polyisocyanates has developed.

Information to medics

Bring this safety data sheet or the label from this product.
Following acute or short term repeated exposures to xylene:
Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal. Pulmonary absorption is rapid with about 60-65% retained at rest. Primary threat to life from ingestion and/or inhalation, is respiratory failure. Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO_2 < 50 mm Hg or pCO_2 > 50 mm Hg) should be intubated. Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled

solvents, so that hyperventilation improves clearance.
A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax. Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Highly flammable liquid and vapour.
In use may form flammable/explosive vapour-air mixture.
Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.
Hazchem Code: ●3YE

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training, evacuate immediate area of personnel not dealing with the emergency, keep them upwind and prevent further access, remove ignition sources and if inside building, ventilate area as well as possible.
Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.
Avoid direct contact with spilled substances.
Ensure adequate ventilation, especially in confined areas.
Avoid inhalation of vapours from spilled material.
Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ground and bond container and receiving equipment.
Use explosion-proof [electrical/lighting/ventilating] equipment.
Use non-sparking tools.

Take action to prevent static discharges.
It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.
Avoid direct contact with the product.
Avoid contact during pregnancy and while nursing.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Take action to prevent static discharges.
Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material

Storage conditions

For optimum performance, store at temperature between 10°c and 35°c.

Incompatible materials

Alcohol
Amines
Avoid static electricity, consider antistatic clothing, footwear and ppe.
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
Water

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Xylene
Long term exposure limit (8 hours) (ppm): 50
Long term exposure limit (8 hours) (mg/m³): 220
Short term exposure limit (15 minutes) (ppm): 100
Short term exposure limit (15 minutes) (mg/m³): 441
Annotations:
BMVG = Biological Monitoring Guidance Value exists
Sk = Can be absorbed through the skin and lead to systemic toxicity.

2-methoxy-1-methylethyl acetate
Long term exposure limit (8 hours) (ppm): 50
Long term exposure limit (8 hours) (mg/m³): 274
Short term exposure limit (15 minutes) (ppm): 100
Short term exposure limit (15 minutes) (mg/m³): 548
Annotations:
Sk = Can be absorbed through the skin and lead to systemic toxicity.

ethyl acetate
Long term exposure limit (8 hours) (ppm): 200
Short term exposure limit (15 minutes) (ppm): 400

Butyl ethanoate
Long term exposure limit (8 hours) (ppm): 150
Long term exposure limit (8 hours) (mg/m³): 724
Short term exposure limit (15 minutes) (ppm): 200
Short term exposure limit (15 minutes) (mg/m³): 966

ethylbenzene
Long term exposure limit (8 hours) (ppm): 100
Long term exposure limit (8 hours) (mg/m³): 441
Short term exposure limit (15 minutes) (ppm): 125

Short term exposure limit (15 minutes) (mg/m³): 552
Annotations:
Sk = Can be absorbed through the skin and lead to systemic toxicity.

Quartz
Long term exposure limit (8 hours) (mg/m³): 0,1 (respirable fraction)
Annotations:
Carc = Capable of causing cancer and/or heritable genetic damage.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

2-methoxy-1-methylethyl acetate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	796 mg/kg bw/day
Long term – Systemic effects - Workers	Inhalation	275 mg/m³
Short term – Local effects - Workers	Inhalation	550 mg/m³

Butyl ethanoate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	7 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	11 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	300 mg/m³
Long term – Systemic effects - Workers	Inhalation	48 mg/m³
Short term – Local effects - Workers	Inhalation	600 mg/m³
Short term – Systemic effects - Workers	Inhalation	600 mg/m³

ethyl acetate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	63 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	734 mg/m³
Long term – Systemic effects - Workers	Inhalation	734 mg/m³
Short term – Local effects - Workers	Inhalation	1468 mg/m³
Short term – Systemic effects - Workers	Inhalation	1468 mg/m³

ethylbenzene

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	180 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	442 mg/m³
Long term – Systemic effects - Workers	Inhalation	77 mg/m³
Short term – Local effects - Workers	Inhalation	293 mg/m³

hexamethylene-di-isocyanate

Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Inhalation	35 µg/m³
Short term – Local effects - Workers	Inhalation	70 µg/m³

HYDROCARBONS, C9, AROMATICS

Duration:	Route of exposure:	DNEL:

Long term – Systemic effects - Workers	Dermal	12.5 mg/kg bw/day
Long term – Systemic effects - Workers	Inhalation	151 mg/m³

propylene carbonate

Duration:	**Route of exposure:**	**DNEL:**
Long term – Local effects - Workers	Dermal	10 mg/cm²
Long term – Systemic effects - Workers	Dermal	20 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	20 mg/m³
Long term – Systemic effects - Workers	Inhalation	70.53 mg/m³

Xylene

Duration:	**Route of exposure:**	**DNEL:**
Long term – Systemic effects - Workers	Dermal	212 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	221 mg/m³
Long term – Systemic effects - Workers	Inhalation	221 mg/m³
Short term – Local effects - Workers	Inhalation	442 mg/m³
Short term – Systemic effects - Workers	Inhalation	442 mg/m³

PNEC

2-methoxy-1-methylethyl acetate

Route of exposure:	**Duration of Exposure:**	**PNEC:**
Freshwater		635 µg/L
Freshwater sediment		3.29 mg/kg
Intermittent release (freshwater)		6.35 mg/L
Marine water		63.5 µg/L
Marine water sediment		329 µg/kg
Sewage treatment plant		100 mg/L
Soil		290 µg/kg

Butyl ethanoate

Route of exposure:	**Duration of Exposure:**	**PNEC:**
Freshwater		180 µg/L
Freshwater sediment		981 µg/kg
Intermittent release (freshwater)		360 µg/L
Marine water		18 µg/L
Marine water sediment		98.1 µg/kg
Sewage treatment plant		35.6 mg/L
Soil		90.3 µg/kg

ethyl acetate

Route of exposure:	**Duration of Exposure:**	**PNEC:**
Freshwater		240 µg/L
Freshwater sediment		1.15 mg/kg
Intermittent release (freshwater)		1.65 mg/L
Marine water		24 µg/L
Marine water sediment		115 µg/kg
Predators		200 mg/kg

Sewage treatment plant	650 mg/L
Soil	148 µg/kg

ethylbenzene

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		100 µg/L
Freshwater sediment		13.7 mg/kg
Intermittent release (freshwater)		100 µg/L
Marine water		10-100 µg/L
Marine water sediment		1.37 mg/kg
Predators		20 mg/kg
Sewage treatment plant		9.6 mg/L
Soil		2.68 mg/kg

hexamethylene-di-isocyanate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		49 µg/L
Freshwater sediment		674 µg/kg
Marine water		4.9 µg/L
Marine water sediment		67.4 µg/kg
Sewage treatment plant		8.42 mg/L
Soil		523 µg/kg

propylene carbonate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		900 µg/L
Intermittent release (freshwater)		9 mg/L
Intermittent release (marine water)		900 µg/L
Marine water		90 µg/L
Sewage treatment plant		7.4 g/L
Soil		810 µg/kg

Xylene

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		44-327 µg/L
Freshwater sediment		2.52-12.46 mg/kg
Intermittent release (freshwater)		10-327 µg/L
Intermittent release (marine water)		1 µg/L
Marine water		4.4-327 µg/L
Marine water sediment		252-12460 µg/kg
Sewage treatment plant		1.6-6.58 mg/L
Soil		852-2310 µg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

All employees working with isocyanates must be informed of the hazards from exposure to the contaminant and the precautions necessary to prevent damage to their health. They should be made aware of the need to carry out

their work so that as little contamination as possible is produced, and the importance of proper use of all safeguards against exposure to themselves and their fellow workers. Adequate training, both in the proper execution of the task and in the use of all associated engineering controls, as well as any personal protective equipment is essential.
Anyone with a medical history of chronic respiratory disease, asthmatic or bronchial attacks, indicators of allergic responces, recurrent eczema or sensitisation conditions of the skin should not handle or work with isocyanates.
Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance capable of causing occupational asthma.
Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.
Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restriction on use should be created for each workplace or task.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.
Apply standard precautions during use of the product. Avoid inhalation of vapours.
Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used.

Hygiene measures

Take off contaminated clothing and wash it before reuse.
Discard items which cannot be decontaminated, including leather shoes, boots, belts, watch straps, gloves etc.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Work situation	Type	Class	Colour	Standards	
In areas of low or poor ventilation, increase LEV by mechanical means.	Suitable respiratory protection advice for the correct personal selection can be obtained from EN529:2005				

Respiratory protection is only required in the likelihood that relevant exposure limits may be approached or exceeded, e.g. application in enclosed spaces with restricted air exchange. Concentrations of potentially hazardous substances in air will remain low during normal outdoor application and will not pose a risk to the applicator.

Skin protection

Work situation	Recommended	Type/Category	Standards	
Remove contaminated clothing and protective equipment before entering eating areas.	Dedicated work clothing should be worn.	-	-	

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
To avoid skin allergies such as dermatitus or eczema wear protective gloves when using this product.	Vinyl/PVC | 0.65 mm | Breakthrough time: > 480 min | Std: EN374-3, EN388, EN511	0.65 mm	> 480	EN374-3, EN388, EN511	

Protection of hands: There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Eye protection

Work situation	Type	Standards	
Roller application or brushing	Safety Goggles	EN166:2001	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Liquid

Colour
Gray

Odour / Odour threshold
Characteristic

pH
No data available.

Density (g/cm^3)
No data available.

Kinematic viscosity
No data available.

Dynamic viscosity
1500 mPa.s (20 °C)

Particle characteristics
No data available

Phase changes

Melting point/Freezing point (°C)
No data available

Softening point/range (°C)
Does not apply to liquids.

Boiling point (°C)
75

Vapour pressure
No data available

Relative vapour density
1.2

Decomposition temperature (°C)
No data available

Data on fire and explosion hazards

Flash point (°C)

5

Flammability (°C)

The material is ignitable.

Auto-ignition temperature (°C)

No data available

Lower and upper explosion limit (% v/v)

No data available

Solubility

Solubility in water

Reacts with water

n-octanol/water coefficient (LogKow)

No data available.

Solubility in fat (g/L)

No data available.

9.2. Other information

Sensitivity to shock

No

Evaporation rate (n-butylacetate = 100)

No data available

Oxidizing properties

No data available.

Other physical and chemical parameters

Reacts with water developing carbon dioxide

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

10.5. Incompatible materials

Alcohol
Amines
Avoid static electricity, consider antistatic clothing, footwear and ppe.
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
Water

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

Based on available data for the mixture, the classification criteria are not met.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Asthma like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to

high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with a sudden onset of persistent asthma like sysmptoms within minutes or hours of a documented exposure to the irritant.

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data for the mixture, the classification criteria are not met.

Carcinogenicity

Based on available data for the mixture, the classification criteria are not met.

Reproductive toxicity

Based on available data for the mixture, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

Xylene has been classified by IARC as a group 3 carcinogen.
ethylbenzene has been classified by IARC as a group 2B carcinogen.
Quartz has been classified by IARC as a group 1 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

Based on available data for the mixture, the classification criteria are not met.

12.3. Bioaccumulative potential

Based on available data for the mixture, the classification criteria are not met.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.
This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste. (*)
HP 3 - Flammable
HP 4 - Irritant (skin irritation and eye damage)

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 6 - Acute toxicity
HP 13 – Sensitising
Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
A hierarchy of control may exist, users should investigate disposal options, containers that have been sufficiently cleaned of product should be recycled where possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. It is the responsibilty of the waste producer to assign the appropriate code to the waste by sector and process type, for disposal within EU & GB, the relevant waste code should be identified from the European Waste Catalogue see

https://assets.publishing.service.gov.uk/media/6152d0b78fa8f5610b9c222b/Waste_classification_technical_guidance_WM3.pdf

Liquid uncured product should be disposed of as special hazardous waste (EWC Identified with * i.e. 12 34 56*).
Solid fully cured product should be disposed of as special non-hazardous waste (EWC Identified without * i.e. 12 34 56).
As a guide only, we have identified the most suitable code below for uncontaminated residual waste, it is upon the waste producer to satisfy themselves this is the most appropriate code. Wastes may be subject to ADR Regulations.

EWC code

08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances
08 01 12	Waste paint and varnish other than those mentioned in 08 01 11

Specific labelling

Contaminated packing

EWC code

08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances
08 01 12	Waste paint and varnish other than those mentioned in 08 01 11

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN1263	PAINT RELATED MATERIAL	Transport hazard class: 3 Label: 3 Classification code: F1 	II	No	Limited quantities: 5 L Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN1263	PAINT RELATED MATERIAL	Transport hazard class: 3 Label: 3 Classification code: F1 	II	No	Limited quantities: 5 L EmS: F-E S-E See below for additional information.
IATA	UN1263	PAINT RELATED MATERIAL	Transport hazard class: 3 Label: 3 Classification code: F1	II	No	See below for additional

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
						information.

* Packing group

** Environmental hazards

Additional information

This product is within scope of the regulations of transport of dangerous goods.
ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.
IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.
IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.
Hazchem Code: ●3YE

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.
People under the age of 18 shall not be exposed to this product.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

Use of this product requires dedicated training in work with polyurethane and epoxy products.

Control of Major Accident Hazards (COMAH) - Categories / dangerous substances

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

UK-REACH, Annex XVII

hexamethylene-di-isocyanate is subject to restrictions, UK-REACH annex XVII (entry 74).
Xylene is subject to UK-REACH restrictions (entry 40).
2-methoxy-1-methylethyl acetate is subject to UK-REACH restrictions (entry 40).
reaction mass of ethylbenzene and xylene is subject to UK-REACH restrictions (entry 40).
HYDROCARBONS, C9, AROMATICS is subject to UK-REACH restrictions (entry 40).
ethyl acetate is subject to UK-REACH restrictions (entry 40).
Butyl ethanoate is subject to UK-REACH restrictions (entry 40).
ethylbenzene is subject to UK-REACH restrictions (entry 40).

Additional information

Not applicable.

Sources

The Management of Health and Safety at Work Regulations 1999.
The Health and Safety at Work etc. Act 1974 Regulations 2013.
Control of Major Accident Hazards (COMAH) Regulations 2015.
Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals as retained and amended in UK law.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.
EUH204, Contains isocyanates. May produce an allergic reaction.
EUH401, To avoid risks to human health and the environment, comply with the instructions for use.
H225, Highly flammable liquid and vapour.
H226, Flammable liquid and vapour.
H302, Harmful if swallowed.
H304, May be fatal if swallowed and enters airways.
H312, Harmful in contact with skin.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H319, Causes serious eye irritation.
H330, Fatal if inhaled.
H332, Harmful if inhaled.
H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335, May cause respiratory irritation.
H336, May cause drowsiness or dizziness.
H341, Suspected of causing genetic defects.
H360, May damage fertility or the unborn child.
H372, Causes damage to organs through prolonged or repeated exposure.
H373, May cause damage to organs through prolonged or repeated exposure.
H400, Very toxic to aquatic life.
H410, Very toxic to aquatic life with long lasting effects.
H411, Toxic to aquatic life with long lasting effects.
H412, Harmful to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU 19 = Building and construction work
PROC 10 = Roller application or brushing
PC 9a = Coatings and Paints, Fillers, Putties, Thinners
ERC 5 = Industrial use resulting in inclusion into or onto a matrix

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association

IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the mixture in regard to physical hazards has been based on experimental data.

The safety data sheet is validated by

William Harding

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en