



PROTECTIVE POLYMERS

SAFETY DATA SHEET ProTect ST and Protect STC curing agent

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

1.1. Product identifier

Product name P ProTect ST and Protect STC curing agent

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

Identified uses PC 9a: Coatings and paints, thinners, paint removers. Curing agent for use in two pack epoxy coatings.

Uses advised against For professional users only.

1.3. Details of the supplier of the safety data sheet

Supplier Protective Polymers Ltd
Lydford Road
Meadow Lane Industrial Estate
Alfreton
DE55 7RQ

Contact person SDS@protectivepolymers.com

1.4. Emergency telephone number

Emergency telephone +44 (0)1623 441106(Not 24 Hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word

Danger

Hazard statements

H226 Flammable liquid and vapour.
H302+H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.

ProTect ST and Protect STC curing agent

Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p>
---------------------------------	---

Contains BENZYL ALCOHOL, ISOPHORONEDIAMINE, TRIETHYLENETETRAMINE, XYLENE

Other information

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<p>BENZYL ALCOHOL 30-60%</p> <p>CAS number: 100-51-6 EC number: 202-859-9 REACH registration number: 01-2119492630-38-0000</p>
<p>Classification</p> <p>Acute Tox. 4 - H302 Acute Tox. 4 - H332</p>
<p>ISOPHORONEDIAMINE 10-30%</p> <p>CAS number: 2855-13-2 EC number: 220-666-8 REACH registration number: 01-2119514687-32-0000</p>
<p>Classification</p> <p>Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412</p>
<p>TRIETHYLENETETRAMINE 1-5%</p> <p>CAS number: 112-24-3 EC number: 203-950-6</p>
<p>Classification</p> <p>Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412</p>

ProTect ST and Protect STC curing agent

XYLENE		1-5%
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-0000
Classification		
Flam. Liq. 3 - H226		
Acute Tox. 4 - H312		
Acute Tox. 4 - H332		
Skin Irrit. 2 - H315		
Asp. Tox. 1 - H304		
ETHYLBENZENE		<1%
CAS number: 100-41-4	EC number: 202-849-4	REACH registration number: 01-2119489370-35-0000
Classification		
Flam. Liq. 2 - H225		
Acute Tox. 4 - H332		
STOT RE 2 - H373		
Asp. Tox. 1 - H304		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention immediately.
Skin contact	Remove affected person from source of contamination. Rinse immediately with plenty of water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.

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

General information No data available on the mixture itself.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemicals, sand, dolomite etc. Do not use water, if avoidable.

5.2. Special hazards arising from the substance or mixture

Specific hazards The product is flammable. Heating may generate flammable vapours.

ProTect ST and Protect STC curing agent

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

For non-emergency personnel Keep unnecessary and unprotected personnel away from the area.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Keep combustible materials away from spillage. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Avoid contamination of ponds or watercourses with washing down water.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Do not wear contact lenses. Avoid spilling. Avoid contact with skin and eyes. Eye wash facilities and emergency shower must be available when handling this product. During application and drying, solvent vapours will be emitted.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store under well-ventilated conditions at a temperature below 25°C.

Storage class Corrosive storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 220 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 441 mg/m³(Sk)

Occupational Exposure Limits (Ireland):

Long-term exposure limit (8-hour TWA): NAOSH (Ireland) OELV 8 hours; 50 ppm 221 mg/m³

Short-term exposure limit (15-minute): NAOSH (Ireland) OELV-15 min 100 ppm 442 mg/m³

ProTect ST and Protect STC curing agent

ETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³

Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³

Sk

Occupational Exposure Limits (Ireland):

Long-term exposure limit (8-hour TWA): NAOSH (Ireland) OELV 8 hours; 100 ppm 442 mg/m³

Short-term exposure limit (15-minute): NAOSH (Ireland) OELV-15 min 200 ppm 884 mg/m³

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Wear protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374. Gloves made from the following material may provide suitable chemical protection: Nitrile rubber. Viton rubber (fluoro rubber). Polyvinylidene chloride/polyethylene (PVDC/PE). The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Glove thickness is not necessarily a good measure of glove resistance as the permeation rate will depend on the exact glove composition. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

Other skin and body protection

Wear appropriate clothing to prevent skin contamination. Provide eyewash station.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Amber.
Odour	Characteristic.
pH	Not applicable.
Initial boiling point and range	137°C
Flash point	25°C Closed cup.

ProTect ST and Protect STC curing agent

Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.1% Upper flammable/explosive limit: 7%
Vapour pressure	Not available.
Relative density	0.97 - 1.01
Solubility(ies)	Immiscible with water.
Partition coefficient	Not available.
Viscosity	Kinematic viscosity > 20.5 mm ² /s.
9.2. Other information	
Other information	No additional information
Volatile organic compound	This product contains a maximum VOC content of 29 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity See the other subsections of this section for further details.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Avoid contact with the following materials: Acids. Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Ammonia or amines.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 963.39

Acute toxicity - dermal

ATE dermal (mg/kg) 6,451.61

Acute toxicity - inhalation

ATE inhalation (gases ppm) 10,416.67

ATE inhalation (vapours mg/l) 25.46

ATE inhalation (dusts/mists mg/l) 3.47

Inhalation Harmful by inhalation. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

ProTect ST and Protect STC curing agent

Ingestion	Causes burns. May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.
Skin contact	Causes burns. Harmful in contact with skin. May cause sensitisation by skin contact. May cause allergic contact eczema. Product has a defatting effect on skin.
Eye contact	Severe irritation, burning and tearing. Causes burns.

SECTION 12: Ecological information

Ecotoxicity The product contains a substance which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Toxicity No data on the mixture itself.

12.2. Persistence and degradability

Persistence and degradability No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. Waste should be treated as controlled waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3066

UN No. (IMDG) 3066

UN No. (ICAO) 3066

UN No. (ADN) 3066

14.2. UN proper shipping name

Proper shipping name (ADR/RID) PAINT RELATED MATERIAL

Proper shipping name (IMDG) PAINT RELATED MATERIAL

ProTect ST and Protect STC curing agent

Proper shipping name (ICAO) PAINT RELATED MATERIAL

Proper shipping name (ADN) PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C9
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	3
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78

and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
----------------	--

ProTect ST and Protect STC curing agent

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

- WEL: Workplace Exposure Limit.
- ATE: Acute Toxicity Estimate.
- CAS: Chemical Abstracts Service.
- DMEL: Derived Minimal Effect Level.
- DNEL: Derived No Effect Level.
- PNEC: Predicted No Effect Concentration.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.

Revision date 14/08/2018

Revision 5

Supersedes date 15/02/2018

SDS number 19259

Hazard statements in full

- 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.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H412 Harmful to aquatic life with long lasting effects.

The information in this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.