



# Technical Manual



**Liquid Membrane**  
COSHH/MSDS/Operations/Performance



**Mastic Adhesive**  
COSHH/MSDS/Operations/Performance



**Instant Set Spray Grade**  
COSHH/MSDS/Operations/Performance



**Top Coat**  
COSHH/MSDS/Operations/Performance



**Strengthening Tape**  
Operations



**EcoProof**  
Maintenance & Servicing  
Chemical Resistance  
Certifications

**1. Identification Of The Substance / Preparation And Of The Company:**

1.1 Trade Name:	<b>EcoProof Liquid Membrane</b>
1.2 Application Of The Preparation:	Protective & waterproofing membrane
1.3 Supplier:	EcoProof Ltd The Enterprise Zone Portobello Sheffield S1 4DP
1.4 Contact Tel. No.	Tel. 01948 841018

**2. Composition / Information On Ingredients:**

2.1 Description:	Water suspension of petroleum derived hydrocarbons (polymer modified emulsified asphalt) and inert filters.
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**3. Hazardous Identification:**

3.1 Hazards:	This product is not classified as dangerous according to EU directive 199/45/EU
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**4. First Aid Measures:**

4.1 After Skin Contact:	This is an alkaline product. If splashed on the skin immediately wash thoroughly with fresh water. If the product has dried on the skin massage the area with medical grade mineral oil, baby oil or edible oil, then wash with soap and water. If irritation persists seek medical attention.
4.2 After Eye Contact:	Flush thoroughly with fresh water for at least ten minutes. Seek medical attention.
4.3 After Swallowing: <b>DO NOT INGEST</b>	DO NOT INDUCE VOMITING. Seek medical attention.
4.4 Note To Physician:	No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen has cooled, it will do no further harm and in fact provides a sterile covering over a burnt area. As healing takes place, the bitumen plaque will detach itself, usually after a few days. If solvent treatment is used, it should be followed by washing with soap and water, then the application of a proprietary re-fatting agent or skin cleansing cream. Only medically approved solvents may be used to remove bitumen from burns, as other solvents could cause further skin damage.

## **5. Fire Fighting Measures:**

5.1 Hazards:	Not explosive. Not auto – flammable. Not flammable. The product itself will not burn. If anything the packaging may be involved in a fire.
5.2 Extinguishing Agent:	Use CO2, dry chemical powders or alcohol resistant foam. If water is used, contain any run-off.

## **6. Accidental Release Measures:**

6.1 Environmental Protection:	Avoid spillage into sewers or surface water.
6.2 Measures For Cleaning/Collecting:	<b>Large spills:</b> Pump into plastic containers and rework/dispose as per local legislation. <b>Small spills:</b> Use non-combustible absorbent and shovel into a suitable container for disposal.

## **7. Handling And Storage:**

7.1 Handling:	Ensure good ventilation when using in confined areas.
7.2 Storage:	Store in a cool dry place.
7.3 Training:	This product does not require any special training before use.

## **8. Exposure Controls / Personal Protection:**

8.1 Hygienic Measures:	Not hazardous in normal use. Avoid contact with eyes and skin.
8.2 Personal Protective Equipment (PPE):	<b>Eye protection:</b> Safety glasses or splash goggles. <b>Body protection:</b> Long sleeves and loose clothing.

## **9. Physical And Chemical Properties:**

9.1 Form:	Liquid
9.2 Colour:	Brown
9.3 Odour:	Slight resinous petroleum odour
9.4 Odour Threshold:	NA
9.5 Coefficient Of Water/Oil Distribution.	N/A
9.6 Change In Condition:	Boiling Point: 100°C (water) Freezing Point: 0°C
9.7 PH:	7-13
9.8 Specific Gravity:	1.00 (approx.)
9.9 Vapour Pressure:	(mm Hg) 17 @ 20°C (water)
9.10 Vapour Density:	>1 (air=1)
9.11 Evaporation Rate:	<1 (nBuAcetate=1)
9.12 Volatiles %:	30-60 (water)
9.13 Solubility In Water:	Partially soluble

## 10. Stability And Reactivity:

10.1 Stability:	Stable under normal conditions
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## 11. Toxicological Information:

11.1 Primary Irritant Effects:	<b>On the eye:</b> Slightly irritating to eyes. <b>On the skin:</b> Slightly irritating to skin. <b>Chronic toxicity:</b> Repeated exposure to low levels will <b>not</b> cause adverse effects. <b>Contact sensitization:</b> Does not provoke a sensitization reaction.
11.2 Additional Info:	Not actually toxic. After ingestion it may cause vomiting. If large quantities are ingested, treat symptomatically. <b>Do not induce vomiting.</b> If irritant effects are seen, these will be mild to moderate, depending on exposure. If in contact with eyes flushing with water is recommended.

## 12. Ecological Information:

12.1 General Notes:	The product is not considered harmful to Atic organisms nor to cause long-term adverse effects in the environment. The surfactants used in the product are biodegradable in line with the requirements of EU directives 73/404/EEC and 73/405/EEC and their subsequent amendments.
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## 13. Disposal Considerations:

13.1 Recommendations:	Observe safe handling precautions and local legislation. May go to land fill.
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## 14. Transportation Information:

14.1 Regulations:	<ul style="list-style-type: none"><li>• Not subject to ADR/IATA/IMDG codes.</li><li>• Not subject to the controlled products or the transportation of dangerous goods regulations.</li></ul>
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## 15. Regulatory Information:

15.1 Labelling according to EU guidelines:	This product is not classified as dangerous according to EU Directive 1999/45/EC and national laws.
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## 16. Other Information:

16.1 Liability:	<p>The information provided is offered in good faith and is based on our current knowledge without guarantee of accuracy. We do not accept responsibility for damage and claims arising from handling, transport, storage or disposal of the product. The information on this data sheet applies only to the product named above.</p> <p>This does not constitute a guarantee or warranty for any specific product feature and shall not establish a legally contractual relationship.</p>
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Supplier:	EcoProof Ltd The Enterprise Zone Portobello Sheffield S1 4DP  Tel. 01948 841018  Fax. 01948 841018  E-mail: info@ecoproof.co.uk
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THIS PRODUCT IS NOT SUBJECT TO THE CONTROLLED PRODUCTS OR THE  
TRANSPORTATION OF DANGEROUS GOODS REGULATION

**1. Material identification:**

1.1 Trade Name:	<b>EcoProof Liquid Membrane</b>
1.2 Chemical family:	Water suspension of petroleum derived hydrocarbons (polymer modified emulsified asphalt) and inert fillers.
1.3 Material Use:	Protective & waterproof coating
1.4 T.D.G. Classification:	NON REGULATED
1.5 WHIMIS Classification:	NON REGULATED

**2. Hazardous Ingredients:**

COMPONENT	CAS#	% (BY MASS)	LC50 (pmm) (rat inhal)	LD50 (mg/kg) (rat oral)
Complex mixture of bitumens	N/A	40-70	N/A	N/A
Anionic surfactants	N/A	0.5-2.0	N/A	N/A
Water	7732-18-5	30-60	N/A	N/A
Polymer dispersion	N/A	5-25	N/A	N/A

**3. Physical Properties:**

3.1 Form:	Liquid
3.2 Colour:	Brown
3.3 Odour:	Slight resinous petroleum odour
3.4 Odour Threshold:	NA
3.5 Coefficient of water/oil distribution:	N/A
3.6 Boiling Point:	100°C (water)
3.7 Freezing Point:	0°C
3.8 PH:	7-13
3.9 Specific Gravity:	1.0 (approx.)
3.10 Vapour Pressure:	(mm Hg) 17 @ 20°C (water)
3.11 Vapour Density:	>1 (air=1)
3.12 Evaporation Rate:	<1 (nBuAcetate=1)
3.13 Volatiles %:	30-60 (water)
3.14 Solubility In Water:	Partially soluble

#### **4. Fire & Explosion Data:**

4.1 Means Of Extinction:	Not explosive. Not auto – flammable. Not flammable.
4.2 Sensitivity To Mechanical Impact/Static Discharge:	N/A
4.3 Flash Point (method):	N/A (non-combustible)
4.4 Upper Flammable Limits %:	N/A
4.5 Lower Flammable Limits%:	N/A
4.6 Auto Ignition Temperature:	N/A
4.7 Fire Fighting Instructions:	Use CO2, dry chemical powders or alcohol resistant foam. If water is used, contain any run-off.
4.8 Fire & Explosion Hazards:	EcoProof is a non combustible Liquid and will not burn, but may splatter if the Liquid is heated above its boiling point. Avoid heating above 200 degrees centigrade / 392 degrees Fahrenheit.

## **5. Reactivity Data:**

5.1 Chemical Stability:	Stable
5.2 Incompatible Materials:	Will react with alkaline sensitive materials such as acids and certain metals. Contact with reactive metals such as aluminium or magnesium will result in the formation of explosive hydrogen gas.
5.3 Hazardous Decomposition Products:	Avoid heating above 200°C. At elevated temperatures hazardous vapours can be released, including carbon monoxide, hydrogen chloride, organic acids and aldehydes.
5.4 Hazardous Polymerization:	Will not occur.

## **6. Health Information:**

6.1 Exposure Limit:	N/A
6.2 Inhalation:	N/A
6.3 Skin:	Adhesion
6.4 Eyes:	Adhesion & irritation
6.5 Ingestion:	Blockage of digestive system and/or respiratory tract.
6.6 Chronic Effects:	N/A

## **7. Emergency And First Aid Procedures:**

7.1 Inhalation:	N/A
7.2 Skin:	This is an alkaline product. If splashed on the skin immediately wash thoroughly with fresh water. If the product has dried on the skin massage the area with medical grade mineral oil, baby oil or edible oil, then wash with soap and water. If irritation persists seek medical attention.
7.3 Eyes:	Flush thoroughly with fresh water for at least ten minutes. Seek medical attention.
7.4 Ingestion:	DO NOT INDUCE VOMITING. Seek medical attention.

## **8. Spill Procedures:**

8.1 In The Event Of A Spill:	Dyke and contain, transfer to container for recovery or disposal. Keep out of sewers and surface water.
8.2 Disposal Methods:	Follow federal, provincial and local regulations regarding disposal.

## **9. Special Procedures:**

9.1 Respiratory Protection:	N/A
9.2 Ventilation:	N/A
9.3 Protective Gloves:	Recommended
9.4: Eye Protection:	Safety glasses or splash goggles recommended
9.5 Other protection:	Long sleeves and loose clothing recommended

## **10. Special Precautions:**

10.1 Storage & Handling Conditions:	Keep container tightly closed when not in use. Keep from freezing.
10.2 Special Shipping Info:	Not regulated by the Transportation of Dangerous Goods Regulations
10.3 Prepared By:	EcoProof Ltd
10.4 Prepared On:	28 <sup>th</sup> Sept 2004

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This does not constitute a guarantee or warranty for any specific product feature and shall not establish a legally contractual relationship.



**PLEASE READ MATERIAL SAFETY DATA SHEET AND COSHH DATA SHEET BEFORE USING**  
For full COSHH & Material Safety Data Sheets see your EcoProof specialist or visit [www.Ecoproof.co.uk](http://www.Ecoproof.co.uk)

### **1. Uses:**

EcoProof Liquid Membrane is a cold applied membrane for waterproofing and surface protection. Other uses include rust and corrosion protection of ferrous materials. EcoProof Liquid Membrane can be applied over a wide range of surfaces including roofs, concrete foundations, basements, retaining walls, car parking decks, planters, valleys & guttering, plus many more. It will cover many substrates including timber, concrete, metal, asphalt, asbestos and brick.

### **2. Preparation:**

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| 2.1 | All surfaces should be dry and free from dust, grease and other debris. Any loose debris should be swept away, surfaces pressure washed and allowed to dry. |
| 2.2 | All surfaces should be structurally sound and stable before application.  |
| 2.3 | Use EcoProof Mastic Adhesive to fill smaller gaps (above 3mm). For best results build up in thin layers and allowed to fully dry and cure.                  |
| 2.4 | Use EcoProof Strengthening Tape to cover joints, large gaps, pipe work, 90° angles and other details.   |

### **3. Application:**

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|-----|---|
| 3.1 | <b>Do not</b> apply to wet or frozen surfaces, during or immediately prior to heavy rain. |
| 3.2 | Apply the single component system with the appropriate sprayer, roller or brush.          |
| 3.3 | Apply at an ambient temperature (above 5°C)   |
| 3.4 | Apply evenly <b>two</b> 1mm covering at 1 litres per coat per square metre.               |
| 3.5 | Cures to touch in 1-4 hours (at 20°C) and is largely cured within 48 hours.               |
| 3.6 | The second coat can be applied after first coat has initially cured (1-4 hours).          |
| 3.7 | After preparation it is possible to cover areas greater than 1000 square metres per day.  |

### **4. Storage And Handling:**

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|-----|--|
| 4.1 | Store above 5°C in a cool dry place with containers tightly fastened.                                |
| 4.2 | <b>Do not</b> allow uncured material to freeze.  |
| 4.3 | Although EcoProof Liquid Membrane is non combustible we recommend you avoid temperatures above 200°C |
| 4.4 |  |

4.5	Not subject to the controlled products or the transportation of dangerous goods regulations. Keep out of reach of children.
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## **5. Spillage & Clean Up:**

5.1	<b>Large spills:</b> Pump into plastic containers and rework/dispose as per local legislation. <b>Small spills:</b> Use non-combustible absorbent and shovel into a suitable container for disposal.
5.2	For general clean-ups, white spirits is recommended. For personal clean up of your hands/face, baby oil is recommended.

## **6. Limitations:**

6.1	Drying and curing time will vary depending on temperature and humidity.
6.2	EcoProof Liquid Membrane is mildly alkaline. When applying observe normal health and safety precautions.
6.3	Wear eye protection and other suitable personal protective equipment (PPE).
6.4	For further information refer to the COSHH and MSDS data sheets.

EcoProof Liquid Membrane is manufactured exclusively for EcoProof LTD

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This does not constitute a guarantee or warranty for any specific product feature and shall not establish a legally contractual relationship.

EcoProof Ltd, The Enterprise Zone, Portobello, Sheffield S1 4DP

Web: [www.Ecoproof.co.uk](http://www.Ecoproof.co.uk) Email: [info@Ecoproof.co.uk](mailto:info@Ecoproof.co.uk)

Tel: 01948 841018 Fax: 01948 841018

**EcoProof Liquid Membrane** is a state of the art modified elastomeric asphalt emulsion developed to simplify the waterproofing process and overcome the problems of materials containing toxic solvents and VOC. It has been specifically formulated as a spray applied fully protective waterproofing membrane. EcoProof Liquid Membrane is a cold applied single component system that can be applied using an airless spray system, roller or brush. EcoProof Liquid Membrane allow a solvent free, quick setting membrane that offers excellent strength, elasticity and adhesion.

EcoProof Liquid Membrane is a waterproof adhesive and so fully bonds to most substrates. The specified thickness offers a seamless, flexible and watertight membrane with low environmental impact.

**\* SOLVENT FREE \* NON TOXIC \* ODOURLESS \* NOT FLAMMABLE \***

### 1. Physical Properties – Liquid Form:

Property	Typical results
Specific gravity (liquid) kg/m <sup>3</sup> :	Approx. 1.0
Odour:	None
VOC:	Contains no solvents
Colour:	Brown
% solids: (wt)	53-58
Viscosity, Brookfield sp. #5, 20 rpm:	8000-9000
pH:	10 - 12

### 2. Performance – Cured Membrane Form:

Property	Typical Form
Colour:	Black
Specific gravity g/cm <sup>3</sup> :	Approx. 1.0
Chemical resistance:	Resistant to atmospheric, chemical aerosols, or acid rain. Limited resistance to gasoline, diesel fuel and other petroleum products (see chemical resistance chart)
Biological resistance ASTM E154, ASTM D412:	Passed (>90% original value)
Impact resistance CSB37-GP-500, 23°C	Passed (168 lbs)
Water tightness CGSB 37-GP-56	Zero leakage
Water tightness after impact:	Passed (no leakage)
Tensile strength ASTM D412 (p.s.i):	90
Elongation %	850
Accelerated weathering ASTM G155 D412:	Passed (no deterioration of film)
tensile strength:	Passed (>90% original value)
Hardness (Durometer type 00)	85-87
Salt fog corrosion, steel ASTM D412	1000 hours passing
Surface corrosion ASTM D610	No corrosion after 500 hours, 0.03% after 1000 hours
Adhesion to concrete strength ASTM C907:	765 kPa
Hardness ASTM D2246	50 Type A
Puncture resistance CGSB 37-GP-56:	Passed (no perforations)
Water vapour transmission ASTM E96,	0.04

**1. Identification Of The Substance / Preparation And Of The Company:**

1.1 Trade Name:	<b>EcoProof Mastic Adhesive</b>
1.2 Application Of The Preparation:	Protective waterproofing membrane
1.3 Supplier:	EcoProof Ltd The Enterprise Zone Portobello Sheffield S1 4DP
1.4 Contact Tel. No.	01948 841018

**2. Composition / Information On Ingredients:**

2.1 Description:	Water suspension of petroleum derived hydrocarbons (polymer modified emulsified asphalt) and inert fillers.
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**3. Hazardous Identification:**

3.1 Hazards:	This product is not classified as dangerous according to EU directive 199/45/EU
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**4. First Aid Measures:**

1.1 After Skin Contact:	This is an alkaline product. If splashed on the skin immediately wash thoroughly with fresh water. If the product has dried on the skin massage the area with medical grade mineral oil, baby oil or edible oil, then wash with soap and water. If irritation persists seek medical attention.
1.2 After Eye Contact:	Flush thoroughly with fresh water for at least ten minutes. Seek medical attention.
1.3 After Swallowing: <b>DO NOT INGEST</b>	DO NOT INDUCE VOMITING. Seek medical attention.
4.4 Note To Physician:	No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen has cooled, it will do no further harm and in fact provides a sterile covering over a burnt area. As healing takes place, the bitumen plaque will detach itself, usually after a few days. If solvent treatment is used, it should be followed by washing with soap and water, then the application of a proprietary re-fatting agent or skin cleansing cream. Only medically approved solvents may be used to remove bitumen from burns, as other solvents could cause further skin damage.

## **5. Fire Fighting Measures:**

5.1 Hazards:	Not explosive. Not auto – flammable. Not flammable. The product itself will not burn. If anything the packaging may be involved in a fire.
5.2 Extinguishing Agent:	Use CO <sub>2</sub> , dry chemical powders or alcohol resistant foam. If water is used, contain any run-off.

## **6. Accidental Release Measures:**

6.1 Environmental Protection:	Avoid spillage into sewers or surface water.
6.2 Measures For Cleaning/Collecting:	<b>Large spills:</b> Pump into plastic containers and rework/dispose as per local legislation. <b>Small spills:</b> Use non-combustible absorbent and shovel into a suitable container for disposal.

## **7. Handling And Storage:**

7.1 Handling:	Ensure good ventilation when using in confined areas.
7.2 Storage:	Store in a cool dry place.
7.3 Training:	This product does not require any special training before use.

## **8. Exposure Controls / Personal Protection:**

8.1 Hygienic Measures:	Not hazardous in normal use. Avoid contact with eyes and skin.
8.2 Personal Protective Equipment (PPE):	<b>Eye protection:</b> Safety glasses or splash goggles. <b>Body protection:</b> Long sleeves and loose clothing.

## **9. Physical And Chemical Properties:**

9.1 Form:	Liquid
9.2 Colour:	Brown
9.3 Odour:	Slight resinous petroleum odour
9.4 Odour Threshold:	NA
9.5 Coefficient Of Water/Oil Distribution.	N/A
9.6 Change In Condition:	Boiling Point: 100°C (water) Freezing Point: 0°C
9.7 PH:	7-13
9.8 Specific Gravity:	1.00 (approx.)
9.9 Vapour Pressure:	(mm Hg) 17 @ 20°C (water)
9.10 Vapour Density:	>1 (air=1)
9.11 Evaporation Rate:	<1 (nBuAcetate=1)
9.12 Volatiles %:	30-60 (water)
9.13 Solubility In Water:	Partially soluble

## 10. Stability And Reactivity:

10.1 Stability:	Stable under normal conditions
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## 11. Toxicological Information:

11.1 Primary Irritant Effects:	<b>On the eye:</b> Slightly irritating to eyes. <b>On the skin:</b> Slightly irritating to skin. <b>Chronic toxicity:</b> Repeated exposure to low levels will <b>not</b> cause adverse effects. <b>Contact sensitization:</b> Does not provoke a sensitization reaction.
11.2 Additional Info:	Not actually toxic. After ingestion it may cause vomiting. If large quantities are ingested, treat symptomatically. <b>Do not induce vomiting.</b> If irritant effects are seen, these will be mild to moderate, depending on exposure. If in contact with eyes flushing with water is recommended.

## 12. Ecological Information:

12.1 General Notes:	The product is not considered harmful to Aquatic organisms nor to cause long-term adverse effects in the environment. The surfactants used in the product are biodegradable in line with the requirements of EU directives 73/404/EEC and 73/405/EEC and their subsequent amendments.
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## 13. Disposal Considerations:

13.1 Recommendations:	Observe safe handling precautions and local legislation. May go to land fill.
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## 14. Transportation Information:

14.1 Regulations:	<ul style="list-style-type: none"><li>• Not subject to ADR/IATA/IMDG codes.</li><li>• Not subject to the controlled products or the transportation of dangerous goods regulations.</li></ul>
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## 15. Regulatory Information:

15.1 Labelling according to EU guidelines:	This product is not classified as dangerous according to EU Directive 1999/45/EC and national laws.
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## 16. Other Information:

16.1 Liability:	<p>The information provided is offered in good faith and is based on our current knowledge without guarantee of accuracy. We do not accept responsibility for damage and claims arising from handling, transport, storage or disposal of the product. The information on this data sheet applies only to the product named above.</p> <p>This does not constitute a guarantee or warranty for any specific product feature and shall not establish a legally contractual relationship.</p>
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Supplier:	EcoProof Ltd The Enterprise Zone Portobello Sheffield  Tel. 01948 841018  Fax. 01948 841018  E-mail: info@ecoproof.co.uk
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**THIS PRODUCT IS NOT SUBJECT TO THE CONTROLLED PRODUCTS OR THE  
TRANSPORTATION OF DANGEROUS GOODS REGULATION**

**1. Material identification:**

1.1 Trade Name:	<b>EcoProof Mastic Adhesive</b>
1.2 Chemical family:	Water suspension of petroleum derived hydrocarbons (polymer modified emulsified asphalt) and inert fillers.
1.3 Material Use:	Protective waterproof coating
1.4 T.D.G. Classification:	NON REGULATED
1.5 WHIMIS Classification:	NON REGULATED

**2. Hazardous Ingredients:**

COMPONENT	CAS#	% (BY MASS)	LC50 (pmm) (rat inhal)	LD50 (mg/kg) (rat oral)
Complex mixture of bitumens	N/A	40-70	N/A	N/A
Anionic surfactants	N/A	0.5-2.0	N/A	N/A
Water	7732-18-5	30-60	N/A	N/A
Polymer dispersion	N/A	5-25	N/A	N/A

### **3. Physical Properties:**

3.1 Form:	Liquid
3.2 Colour:	Brown
3.3 Odour:	Slight resinous petroleum odour
3.4 Odour Threshold:	NA
3.5 Coefficient of water/oil distribution:	N/A
3.6 Boiling Point:	100°C (water)
3.7 Freezing Point:	0°C
3.8 PH:	7-13
3.9 Specific Gravity:	1.0 (approx.)
3.10 Vapour Pressure:	(mm Hg) 17 @ 20°C (water)
3.11 Vapour Density:	>1 (air=1)
3.12 Evaporation Rate:	<1 (nBuAcetate=1)
3.13 Volatiles %:	30-60 (water)
3.14 Solubility In Water:	Partially soluble

### **4. Fire & Explosion Data:**

4.1 Means Of Extinction:	Not explosive. Not auto – flammable. Not flammable.
4.2 Sensitivity To Mechanical Impact/Static Discharge:	N/A
4.3 Flash Point (method):	N/A (non-combustible)
4.4 Upper Flammable Limits %:	N/A
4.5 Lower Flammable Limits%:	N/A
4.6 Auto Ignition Temperature:	N/A
4.7 Fire Fighting Instructions:	Use CO2, dry chemical powders or alcohol resistant foam. If water is used, contain any run-off.
4.8 Fire % Explosion Hazards:	EcoProof is a non combustible Liquid and will not burn, but may splatter if the Liquid is heated above its boiling point. Avoid heating above 200 degrees centigrade / 392 degrees Fahrenheit.



## **5. Reactivity Data:**

5.1 Chemical Stability:	Stable
5.2 Incompatible Materials:	Will react with alkaline sensitive materials such as acids and certain metals. Contact with reactive metals such as aluminium or magnesium will result in the formation of explosive hydrogen gas.
5.3 Hazardous Decomposition Products:	Avoid heating above 200°C. At elevated temperatures hazardous vapours can be released, including carbon monoxide, hydrogen chloride, organic acids and aldehydes.
5.4 Hazardous Polymerization:	Will not occur.

## **6. Health Information:**

6.1 Exposure Limit:	N/A
6.2 Inhalation:	N/A
6.3 Skin:	Adhesion
6.4 Eyes:	Adhesion & irritation
6.5 Ingestion:	Blockage of digestive system and/or respiratory tract.
6.6 Chronic Effects:	N/A

## **7. Emergency And First Aid Procedures:**

7.1 Inhalation:	N/A
7.2 Skin:	This is an alkaline product. If splashed on the skin immediately wash thoroughly with fresh water. If the product has dried on the skin massage the area with medical grade mineral oil, baby oil or edible oil, then wash with soap and water. If irritation persists seek medical attention.
7.3 Eyes:	Flush thoroughly with fresh water for at least ten minutes. Seek medical attention.
7.4 Ingestion:	DO NOT INDUCE VOMITING. Seek medical attention.

## **8. Spill Procedures:**

8.1 In The Event Of A Spill:	Dyke and contain, transfer to container for recovery or disposal. Keep out of sewers and surface water.
8.2 Disposal Methods:	Follow federal, provincial and local regulations regarding disposal.

## **9. Special Procedures:**

9.1 Respiratory Protection:	N/A
9.2 Ventilation:	N/A
9.3 Protective Gloves:	Recommended
9.4: Eye Protection:	Safety glasses or splash goggles recommended
9.5 Other protection:	Long sleeves and loose clothing recommended

## **10. Special Precautions:**

10.1 Storage & Handling Conditions:	Keep container tightly closed when not in use. Keep from freezing.
10.2 Special Shipping Info:	Not regulated by the Transportation of Dangerous Goods Regulations
10.3 Prepared By:	EcoProof Ltd
10.4 Prepared On:	28 <sup>th</sup> Sept 2004

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**PLEASE READ MATERIAL SAFETY DATA SHEET AND COSHH DATA SHEET BEFORE USING**For full COSHH & Material Safety Data Sheets see your EcoProof specialist or visit [www.EcoProof.co.uk](http://www.EcoProof.co.uk)**1. Uses:**

EcoProof Mastic Adhesive is used in conjunction with EcoProofSpray & EcoProof Liquid Membrane to seal and prepare the surface to be protected. Use EcoProof Mastic Adhesive and EcoProof Strengthening Tape to prepare the surface in these key areas: filling gaps, cracks, voids, pipe work, up stands, 90° angles and other details. It will cover many substrates including timber, concrete, metal, asphalt, asbestos and brick.

**2. Preparation:**

- |     |   |
|-----|---|
| 2.1 | All surfaces should be dry and free from dust, grease and other debris. Any loose debris should be swept away, surfaces pressure washed and allowed to dry. |
| 2.2 | All surfaces should be structurally sound and stable before application.  |

**3. Application:**

- |     |   |
|-----|---|
| 3.1 | <b>Do not</b> apply to wet or frozen surfaces, during or immediately prior to heavy rain. |
| 3.2 | Apply the single component system with the appropriate trowel, brush or similar.          |
| 3.3 | Apply to gaps and voids over 3mm.   |
| 3.4 | Apply at an ambient temperature (above 5°C)   |
| 3.5 | Apply in thin layers if time permits.   |
| 3.6 | Cures fully in 24 hours (at 20°C and 50% humidity) when applied at 1mm thickness.         |

**4. Storage And Handling:**

- |     |  |
|-----|--|
| 4.1 | Store above 5°C in a cool dry place with containers tightly fastened.                                |
| 4.2 | <b>Do not</b> allow uncured material to freeze.  |
| 4.3 | Although EcoProof Mastic Adhesive is non combustible we recommend you avoid temperatures above 200°C |
| 4.4 | Not subject to the controlled products or the transportation of dangerous goods regulations.         |
| 4.5 | Keep out of reach of children.   |

## 5. Spillage & Clean Up:

- |     |   |
|-----|---|
| 5.1 | <b>Large spills:</b> Pump into plastic containers and rework/dispose as per local legislation.<br><b>Small spills:</b> Use non-combustible absorbent and shovel into a suitable container for disposal. |
| 5.2 | For general clean-ups, white spirits is recommended. For personal clean up of your hands/face, baby oil is recommended.   |

## 6. Limitations:

- |     |  |
|-----|--|
| 6.1 | Drying and curing time will vary depending on temperature and humidity.                                  |
| 6.2 | EcoProof Mastic Adhesive is mildly alkaline. When applying observe normal health and safety precautions. |
| 6.3 | Wear eye protection and other suitable personal protective equipment (PPE).                              |
| 6.4 | For further information refer to the COSHH and MSDS data sheets.   |

EcoProof Mastic Adhesive is manufactured exclusively for EcoProof LTD

The information provided is offered in good faith and is based on our current knowledge without guarantee of accuracy. We do not accept responsibility for damage and claims arising from handling, transport, storage or disposal of the product. The information on this data sheet applies only to the product named above.

This does not constitute a guarantee or warranty for any specific product feature and shall not establish a legally contractual relationship.

EcoProof Ltd, The Enterprise Zone, Portobello, Sheffield, S1 4DP Web: <a href="http://www.EcoProof.co.uk">www.EcoProof.co.uk</a> Email: <a href="mailto:info@EcoProof.co.uk">info@EcoProof.co.uk</a> Tel: 01948 841018 Fax: 01948 841018
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**EcoProof Mastic Adhesive** is a state of the art modified elastomeric asphalt emulsion. It has been developed to simplify the waterproofing process and has been specifically formulated as a protective waterproofing membrane. EcoProof Mastic Adhesive is a cold applied single component system that can be applied using a trowel, brush or similar. Once cured it allows a solvent free, quick setting membrane that offers excellent strength, elasticity and adhesion. EcoProof Mastic Adhesive is used along with EcoProof Strengthening Tape to fully prepare the surface prior to applying EcoProof Liquid Membrane or EcoProof Spray.

EcoProof Mastic Adhesive is a waterproof adhesive and so fully bonds to most substrates. The specified thickness offers a seamless, flexible and watertight membrane with low environmental impact.

**\* SOLVENT FREE \* NON TOXIC \*ODOURLESS \*NOT FLAMMABLE \***

#### **8 Physical Properties – Liquid Form:**

Property	Typical results
Specific gravity (liquid) kg/m <sup>3</sup> :	Approx. 1.0
Odour:	None
VOC:	Contains no solvents
Colour:	Brown
% solids: (wt)	63-68
Viscosity, Brookfield sp. #5, 20 rpm:	20,000-30,000
pH:	10 - 12

#### **9 Performance – Cured Membrane Form:**

Property	Typical Form
Colour:	Black
Specific gravity g/cm <sup>3</sup> :	Approx. 1.0
Chemical resistance:	Resistant to atmospheric, chemical aerosols, or acid rain. Limited resistance to gasoline, diesel fuel and other petroleum products (see chemical resistance chart)
Tensile strength ASTM D412 (p.s.i):	50
Elongation %	100
Accelerated weathering ASTM G155 D412: tensile strength:	Passed (no deterioration of film) Passed (>90% original value)
Hardness (durometer type 00)	85-90

### **1. Identification Of The Substance / Preparation And Of The Company:**

1.1 Trade Name:	<b>EcoProofSpray</b>
1.2 Application Of The Preparation:	Protective waterproofing membrane
1.3 Supplier:	EcoProof Ltd The Enterprise Zone Portobello Sheffield S1 4DP
1.4 Contact Tel. No.	01948 841018

### **2. Composition / Information On Ingredients:**

2.1 Description:	Water suspension of petroleum derived hydrocarbons (polymer modified emulsified asphalt) and inert fillers.
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### **3. Hazardous Identification:**

3.1 Hazards:	This product is not classified as dangerous according to EU directive 199/45/EU
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### **4. First Aid Measures:**

4.1 After Skin Contact:	This is an alkaline product. If splashed on the skin immediately wash thoroughly with fresh water. If the product has dried on the skin massage the area with medical grade mineral oil, baby oil or edible oil, then wash with soap and water. If irritation persists seek medical attention.
4.2 After Eye Contact:	Flush thoroughly with fresh water for at least ten minutes. Seek medical attention.
4.3 After Swallowing: <b>DO NOT INGEST</b>	DO NOT INDUCE VOMITING. Seek medical attention.
4.4 Note To Physician:	No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen has cooled, it will do no further harm and in fact provides a sterile covering over a burnt area. As healing takes place, the bitumen plaque will detach itself, usually after a few days. If solvent treatment is used, it should be followed by washing with soap and water, then the application of a proprietary re-fatting agent or skin cleansing cream. Only medically approved solvents may be used to remove bitumen from burns, as other solvents could cause further skin damage.

## **5. Fire Fighting Measures:**

5.1 Hazards:	Not explosive. Not auto – flammable. Not flammable. The product itself will not burn. If anything the packaging may be involved in a fire.
5.2 Extinguishing Agent:	Use CO2, dry chemical powders or alcohol resistant foam. If water is used, contain any run-off.

## **6. Accidental Release Measures:**

6.1 Environmental Protection:	Avoid spillage into sewers or surface water.
6.2 Measures For Cleaning/Collecting:	<b>Large spills:</b> Pump into plastic containers and rework/dispose as per local legislation. <b>Small spills:</b> Use non-combustible absorbent and shovel into a suitable container for disposal.

## **7. Handling And Storage:**

7.1 Handling:	Ensure good ventilation when using in confined areas.
7.2 Storage:	Store in a cool dry place.
7.3 Training:	This product does not require any special training before use.

## **8. Exposure Controls / Personal Protection:**

8.1 Hygienic Measures:	Not hazardous in normal use. Avoid contact with eyes and skin.
8.2 Personal Protective Equipment (PPE):	<b>Eye protection:</b> Safety glasses or splash goggles. <b>Body protection:</b> Long sleeves and loose clothing.

## **9. Physical And Chemical Properties:**

9.1 Form:	Liquid
9.2 Colour:	Brown
9.3 Odour:	Slight resinous petroleum odour
9.4 Odour Threshold:	NA
9.5 Coefficient Of Water/Oil Distribution.	N/A
9.6 Change In Condition:	Boiling Point: 100°C (water) Freezing Point: 0°C
9.7 PH:	7-13
9.8 Specific Gravity:	1.00 (approx.)
9.9 Vapour Pressure:	(mm Hg) 17 @ 20°C (water)
9.10 Vapour Density:	>1 (air=1)
9.11 Evaporation Rate:	<1 (nBuAcetate=1)
9.12 Volatiles %:	30-60 (water)
9.13 Solubility In Water:	Partially soluble

## 10. Stability And Reactivity:

10.1 Stability:	Stable under normal conditions
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## 11. Toxicological Information:

11.1 Primary Irritant Effects:	<b>On the eye:</b> Slightly irritating to eyes. <b>On the skin:</b> Slightly irritating to skin. <b>Chronic toxicity:</b> Repeated exposure to low levels will <b>not</b> cause adverse effects. <b>Contact sensitization:</b> Does not provoke a sensitization reaction.
11.2 Additional Info:	Not actually toxic. After ingestion it may cause vomiting. If large quantities are ingested, treat symptomatically. <b>Do not induce vomiting.</b> If irritant effects are seen, these will be mild to moderate, depending on exposure. If in contact with eyes flushing with water is recommended.

## 12. Ecological Information:

12.1 General Notes:	The product is not considered harmful to Aquatic organisms nor to cause long-term adverse effects in the environment. The surfactants used in the product are biodegradable in line with the requirements of EU directives 73/404/EEC and 73/405/EEC and their subsequent amendments.
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## 13. Disposal Considerations:

13.1 Recommendations:	Observe safe handling precautions and local legislation. May go to land fill.
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## 14. Transportation Information:

14.1 Regulations:	<ul style="list-style-type: none"><li>• Not subject to ADR/IATA/IMDG codes.</li><li>• Not subject to the controlled products or the transportation of dangerous goods regulations.</li></ul>
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## 15. Regulatory Information:

15.1 Labelling according to EU guidelines:	This product is not classified as dangerous according to EU Directive 1999/45/EC and national laws.
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## 16. Other Information:

16.1 Liability:	<p>The information provided is offered in good faith and is based on our current knowledge without guarantee of accuracy. We do not accept responsibility for damage and claims arising from handling, transport, storage or disposal of the product. The information on this data sheet applies only to the product named above.</p> <p>This does not constitute a guarantee or warranty for any specific product feature and shall not establish a legally contractual relationship.</p>
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Supplier:	<p>EcoProof Ltd The Enterprise Zone Portobello Sheffield S1 4DP</p> <p>Tel. 01948 841018</p> <p>Fax.01948 841018</p> <p>E-mail: info@ecoproof.co.uk</p>
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**THIS PRODUCT IS NOT SUBJECT TO THE CONTROLLED PRODUCTS OR THE  
TRANSPORTATION OF DANGEROUS GOODS REGULATION**

## 1. Material identification:

1.1 Trade Name:	<b>EcoProofSpray</b>
1.2 Chemical family:	Water suspension of petroleum derived hydrocarbons (polymer modified emulsified asphalt) and inert filters.
1.3 Material Use:	Protective waterproof coating
1.4 T.D.G. Classification:	NON REGULATED
1.5 WHIMIS Classification:	NON REGULATED

## 2. Hazardous Ingredients:

COMPONENT	CAS#	% (BY MASS)	LC50 (pmm) (rat inhal)	LD50 (mg/kg) (rat oral)
Complex mixture of bitumens	N/A	40-70	N/A	N/A
Anionic surfactants	N/A	0.5-2.0	N/A	N/A
Water	7732-18-5	30-60	N/A	N/A
Polymer dispersion	N/A	5-25	N/A	N/A

### **3. Physical Properties:**

3.1 Form:	Liquid
3.2 Colour:	Brown
3.3 Odour:	Slight resinous petroleum odour
3.4 Odour Threshold:	NA
3.5 Coefficient of water/oil distribution:	N/A
3.6 Boiling Point:	100°C (water)
3.7 Freezing Point:	0°C
3.8 PH:	7-13
3.9 Specific Gravity:	1.0 (approx.)
3.10 Vapour Pressure:	(mm Hg) 17 @ 20°C (water)
3.11 Vapour Density:	>1 (air=1)
3.12 Evaporation Rate:	<1 (nBuAcetate=1)
3.13 Volatiles %:	30-60 (water)
3.14 Solubility In Water:	Partially soluble

### **4. Fire & Explosion Data:**

4.1 Means Of Extinction:	Not explosive. Not auto – flammable. Not flammable.
4.2 Sensitivity To Mechanical Impact/Static Discharge:	N/A
4.3 Flash Point (method):	N/A (non-combustible)
4.4 Upper Flammable Limits %:	N/A
4.5 Lower Flammable Limits%:	N/A
4.6 Auto Ignition Temperature:	N/A
4.7 Fire Fighting Instructions:	Use CO2, dry chemical powders or alcohol resistant foam. If water is used, contain any run-off.
4.8 Fire % Explosion Hazards:	EcoProof is a non combustible Liquid and will not burn, but may splatter if the Liquid is heated above its boiling point. Avoid heating above 200 degrees centigrade / 392 degrees Fahrenheit.

## **5. Reactivity Data:**

5.1 Chemical Stability:	Stable
5.2 Incompatible Materials:	Will react with alkaline sensitive materials such as acids and certain metals. Contact with reactive metals such as aluminium or magnesium will result in the formation of explosive hydrogen gas.
5.3 Hazardous Decomposition Products:	Avoid heating above 200°C. At elevated temperatures hazardous vapours can be released, including carbon monoxide, hydrogen chloride, organic acids and aldehydes.
5.4 Hazardous Polymerization:	Will not occur.

## **6. Health Information:**

6.1 Exposure Limit:	N/A
6.2 Inhalation:	N/A
6.3 Skin:	Adhesion
6.4 Eyes:	Adhesion & irritation
6.5 Ingestion:	Blockage of digestive system and/or respiratory tract.
6.6 Chronic Effects:	N/A

## **7. Emergency And First Aid Procedures:**

7.1 Inhalation:	N/A
7.2 Skin:	This is an alkaline product. If splashed on the skin immediately wash thoroughly with fresh water. If the product has dried on the skin massage the area with medical grade mineral oil, baby oil or edible oil, then wash with soap and water. If irritation persists seek medical attention.
7.3 Eyes:	Flush thoroughly with fresh water for at least ten minutes. Seek medical attention.
7.4 Ingestion:	DO NOT INDUCE VOMITING. Seek medical attention.

## **8. Spill Procedures:**

8.1 In The Event Of A Spill:	Dyke and contain, transfer to container for recovery or disposal. Keep out of sewers and surface water.
8.2 Disposal Methods:	Follow federal, provincial and local regulations regarding disposal.

## **9. Special Procedures:**

9.1 Respiratory Protection:	N/A
9.2 Ventilation:	N/A
9.3 Protective Gloves:	Recommended
9.4: Eye Protection:	Safety glasses or splash goggles recommended
9.5 Other protection:	Long sleeves and loose clothing recommended

## **10. Special Precautions:**

10.1 Storage & Handling Conditions:	Keep container tightly closed when not in use. Keep from freezing.
10.2 Special Shipping Info:	Not regulated by the Transportation of Dangerous Goods Regulations
10.3 Prepared By:	EcoProof Ltd
10.4 Prepared On:	28 <sup>th</sup> Sept 2004

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**PLEASE READ MATERIAL SAFETY DATA SHEET AND COSHH DATA SHEET BEFORE USING**

For full COSHH & Material Safety Data Sheets see your EcoProof specialist or visit [www.ecoproof.co.uk](http://www.ecoproof.co.uk)

**1. Uses:**

EcoProofSpray is a cold applied waterproofing membrane for surface protection. EcoProofSpray can be applied over a wide range of surfaces including roofing, concrete foundations, basements, retaining walls, car parking decks, planters, valleys & guttering plus many more. It will cover many substrates including timber, concrete, metal, asphalt, asbestos and brick.

- |     |   |
|-----|---|
| 2.1 | All surfaces should be dry and free from dust, grease and other debris. Any loose debris should be swept away, surfaces pressure washed and allowed to dry. |
| 2.2 | All surfaces should be structurally sound and stable before application.  |
| 2.3 | Use EcoProof Mastic Adhesive to fill smaller gaps (above 3mm). For best results build up in thin layers and allowed to fully dry and cure.                  |
| 2.4 | Use EcoProof Strengthening Tape to cover joints, large gaps, pipe work, 90° angles and other details.   |

**2. Preparation:****3. Application:**

- |     |  |
|-----|--|
| 3.1 | <b>Do not</b> apply to wet or frozen surfaces, during or immediately prior to heavy rain.            |
| 3.2 | Apply the dual component system with the appropriate specially designed spray machine.               |
| 3.3 | Apply at an ambient temperature (above 5°C)  |
| 3.4 | Apply an even 2mm covering over the prepared surface.  |
| 3.5 | Cures to touch in about one minute (at 20°C) and is largely cured within 48 hours.                   |
| 3.6 | Protection boards or insulation may be applied to surfaces after an initial cure time of 30 minutes. |
| 3.7 | After preparation it is possible to cover areas greater than 1000 square metres per day.             |

**4. Storage And Handling:**

- |     |   |
|-----|---|
| 4.1 | Store above 5°C in a cool dry place with containers tightly fastened.                     |
| 4.2 | <b>Do not</b> allow uncured material to freeze.   |
| 4.3 | Although EcoProofSpray is non combustible we recommend you avoid temperatures above 200°C |

4.4	Not subject to the controlled products or the transportation of dangerous goods regulations.
4.5	Keep out of reach of children.

## 5. Spillage & Clean Up:

5.1	<p><b>Large spills:</b> Pump into plastic containers and rework/dispose as per local legislation.</p> <p><b>Small spills:</b> Use non-combustible absorbent and shovel into a suitable container for disposal.</p> <p><b>Alternatively:</b> Should spillage occur pour an equivalent amount of salt solution (ratio 12:1) onto the spillage and scrape up the combined set products.</p>
5.2	For general clean-ups, white spirits is recommended. For personal clean up of your hands/face, baby oil is recommended.

## 6. Limitations:

6.1	Drying and curing time will vary depending on temperature and humidity.
6.2	EcoProofSpray is mildly alkaline. When applying observe normal health and safety precautions.
6.3	Wear eye protection and other suitable personal protective equipment (PPE).
6.4	For further information refer to the COSHH and MSDS data sheets.

EcoProofSpray is manufactured exclusively for EcoProof LTD

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This does not constitute a guarantee or warranty for any specific product feature and shall not establish a legally contractual relationship.

EcoProof Ltd, The Enterprise Zone, Portobello, Sheffield, S1 4DP

Web: [www.Ecoproof.co.uk](http://www.Ecoproof.co.uk) Email: [info@Ecoproof.co.uk](mailto:info@Ecoproof.co.uk)

Tel: 01948 841018 Fax: 01948 841018

**EcoProofSpray** is a state of the art modified elastomeric asphalt emulsion developed to simplify the waterproofing process and overcome the problems of materials containing toxic solvents and VOC. It has been specifically formulated as a spray applied fully protective waterproofing membrane. The cold applied, dual component system is applied using a specialist airless spray system. EcoProofSpray provides a quick setting membrane that offers excellent strength, elasticity and adhesion.

EcoProofSpray is a waterproof adhesive and so fully bonds to most substrates. The specified thickness sets almost immediately and offers a seamless, flexible and watertight membrane with low environmental impact.

\*      \*      \*      \*      \*

**SOLVENT FREE    NON TOXIC    ODOURLESS    NOT FLAMMABLE**

## 1. Physical Properties – Liquid Form:

Property	Typical results
Specific gravity (liquid) kg/m <sup>3</sup> :	Approx. 1.0
Odour:	None
VOC:	Contains no solvents
Colour:	Brown
% solids: (wt)	57 - 62
Viscosity, SSF @ 25°C (seconds)	15 - 20
pH:	10 - 12

## 2. Performance – Cured Membrane Form:

Property	Typical Form
Chemical resistance: Chemical resistance ASTM G20 10% hydrochloric acid 10% sodium hydroxide saturated lime water:	Resistant to atmospheric, chemical aerosols, or acid rain. Limited resistance to gasoline, diesel fuel and other petroleum products (see chemical resistance chart) Passed (no loss of integrity)
Biological resistance ASTM E154, ASTM D412:	Passed
Impact resistance CSB37-GP-56 @ 23°C (j):	>19
Impact resistance CSB37-GP-56 @ -10°C (j):	>27
Water tightness after impact:	Passed (no leakage)
Specific gravity g/cm <sup>3</sup> :	Approx. 1.0
Tensile strength ASTM D412 (p.s.i):	>22
Adhesion to concrete strength ASTM C907: (amended to tensile adhesion (p.s.i))	>50
Low temperature mandrel @ -25°C	Passed
Crack bridging ASTM C836, un-aged -20°C	Passed (70 cycles)
Crack bridging ASTM C836, aged E20°C	Passed (10 cycles)
Puncture resistance CGSB 37-GP-56: (24 hours @ 29N @ -5°C)	Passed (no perforations)
Water vapour transmission ASTM E96, ng/Pa.sm <sup>2</sup>	>6.6
Water absorption CGSB37 – GP-56M, %inc	>2
Accelerated weathering ASTM G155: D412 tensile strength:	Passed
Hardness (durometer type 00)	78-80
Canadian Construction Materials Centre	Approved (13175)
Colour	Black





**1. Identification Of The Substance / Preparation And Of The Company:**

1.1 Trade Name:	<b>EcoProof Top Coat</b>
1.2 Application Of The Preparation:	Protective & waterproofing membrane
1.3 Supplier:	EcoProof Ltd The Enterprise Zone Portobello Sheffield S1 4DP
1.4 Contact Tel. No.	01948 841018

**2. Composition / Information On Ingredients:**

2.1 Description:	Water suspension of elastomeric synthetic polymers and inert filters.
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**3. Hazardous Identification:**

3.1 Hazards:	This product is not classified as dangerous according to EU directive 199/45/EU
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**4. First Aid Measures:**

4.1 After Skin Contact:	This is an alkaline product. If splashed on the skin immediately wash thoroughly with fresh water. If the product has dried on the skin massage the area with medical grade mineral oil, baby oil or edible oil, then wash with soap and water. If irritation persists seek medical attention.
4.2 After Eye Contact:	Flush thoroughly with fresh water for at least ten minutes. Seek medical attention.
4.3 After Swallowing: <b>DO NOT INGEST</b>	DO NOT INDUCE VOMITING. Seek medical attention.
4.4 Note To Physician:	No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen has cooled, it will do no further harm and in fact provides a sterile covering over a burnt area. As healing takes place, the bitumen plaque will detach itself, usually after a few days. If solvent treatment is used, it should be followed by washing with soap and water, then the application of a proprietary re-fatting agent or skin cleansing cream. Only medically approved solvents may be used to remove bitumen from burns, as other solvents could cause further skin damage.

## **5. Fire Fighting Measures:**

5.1 Hazards:	Not explosive. Not auto – flammable. Not flammable. The product itself will not burn. If anything the packaging may be involved in a fire.
5.2 Extinguishing Agent:	Use CO2, dry chemical powders or alcohol resistant foam. If water is used, contain any run-off.

## **6. Accidental Release Measures:**

6.1 Environmental Protection:	Avoid spillage into sewers or surface water.
6.2 Measures For Cleaning/Collecting:	<b>Large spills:</b> Pump into plastic containers and rework/dispose as per local legislation. <b>Small spills:</b> Use non-combustible absorbent and shovel into a suitable container for disposal.

## **7. Handling And Storage:**

7.1 Handling:	Ensure good ventilation when using in confined areas.
7.2 Storage:	Store in a cool dry place.
7.3 Training:	This product does not require any special training before use.

## **8. Exposure Controls / Personal Protection:**

8.1 Hygienic Measures:	Not hazardous in normal use. Avoid contact with eyes and skin.
8.2 Personal Protective Equipment (PPE):	<b>Eye protection:</b> Safety glasses or splash goggles. <b>Body protection:</b> Long sleeves and loose clothing.

## **9. Physical And Chemical Properties:**

9.1 Form:	Liquid
9.2 Colour:	Various
9.3 Odour:	Slight odour
9.4 Odour Threshold:	NA
9.5 Coefficient Of Water/Oil Distribution.	N/A
9.6 Change In Condition:	Boiling Point: 100°C (water) Freezing Point: 0°C
9.7 PH:	8-11
9.8 Specific Gravity:	1.00 (approx.)
9.9 Vapour Pressure:	(mm Hg) 17 @ 20°C (water)
9.10 Vapour Density:	>1 (air=1)
9.11 Evaporation Rate:	<1 (nBuAcetate=1)
9.12 Volatiles %:	10-20 (water)
9.13 Solubility In Water:	Completely dispersible

## 10. Stability And Reactivity:

10.1 Stability:	Stable under normal conditions
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## 11. Toxicological Information:

11.1 Primary Irritant Effects:	<b>On the eye:</b> Slightly irritating to eyes. <b>On the skin:</b> Slightly irritating to skin. <b>Chronic toxicity:</b> Repeated exposure to low levels will <b>not</b> cause adverse effects. <b>Contact sensitization:</b> Does not provoke a sensitization reaction.
11.2 Additional Info:	Not actually toxic. After ingestion it may cause vomiting. If large quantities are ingested, treat symptomatically. <b>Do not induce vomiting.</b> If irritant effects are seen, these will be mild to moderate, depending on exposure. If in contact with eyes flushing with water is recommended.

## 12. Ecological Information:

12.1 General Notes:	The product is not considered harmful to Aquatic organisms nor to cause long-term adverse effects in the environment. The surfactants used in the product are biodegradable in line with the requirements of EU directives 73/404/EEC and 73/405/EEC and their subsequent amendments.
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## 13. Disposal Considerations:

13.1 Recommendations:	Observe safe handling precautions and local legislation. May go to land fill.
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## 14. Transportation Information:

14.1 Regulations:	<ul style="list-style-type: none"><li>• Not subject to ADR/IATA/IMDG codes.</li><li>• Not subject to the controlled products or the transportation of dangerous goods regulations.</li></ul>
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## 15. Regulatory Information:

15.1 Labelling according to EU guidelines:	This product is not classified as dangerous according to EU Directive 1999/45/EC and national laws.
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## 16. Other Information:

16.1 Liability:	<p>The information provided is offered in good faith and is based on our current knowledge without guarantee of accuracy. We do not accept responsibility for damage and claims arising from handling, transport, storage or disposal of the product. The information on this data sheet applies only to the product named above.</p> <p>This does not constitute a guarantee or warranty for any specific product feature and shall not establish a legally contractual relationship.</p>
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Supplier:	EcoProof Ltd The Enterprise Zone Portobello Sheffield S1 4DP  Tel. 01948841018  Fax. 01948 841018  E-mail: info@ecoproof.co.uk
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**THIS PRODUCT IS NOT SUBJECT TO THE CONTROLLED PRODUCTS OR THE  
TRANSPORTATION OF DANGEROUS GOODS REGULATION**

### **1. Material identification:**

1.1 Trade Name:	<b>EcoProof Top Coat</b>
1.2 Chemical family:	Water suspension of elastomeric synthetic polymers and inert fillers.
1.3 Material Use:	Protective & waterproof coating
1.4 T.D.G. Classification:	NON REGULATED
1.5 WHIMIS Classification:	NON REGULATED

### **2. Hazardous Ingredients:**

COMPONENT	CAS#	% (BY MASS)	LC50 (pmm) (rat inhal)	LD50 (mg/kg) (rat oral)
Complex mixture of synthetic polymers	N/A	40-70	N/A	N/A
Anionic surfactants	N/A	0.5-2.0	N/A	N/A
Water	7732-18-5	10-20	N/A	N/A
Inert mineral fillers	N/A	10-20	N/A	N/A

### **3. Physical Properties:**

3.1 Form:	Liquid
3.2 Colour:	Various colours
3.3 Odour:	Slight odour
3.4 Odour Threshold:	NA
3.5 Coefficient of water/oil distribution:	N/A
3.6 Boiling Point:	100°C (water)
3.7 Freezing Point:	0°C
3.8 PH:	8-11
3.9 Specific Gravity:	1.0 (approx.)
3.10 Vapour Pressure:	(mm Hg) 17 @ 20°C (water)
3.11 Vapour Density:	>1 (air=1)
3.12 Evaporation Rate:	<1 (nBuAcetate=1)
3.13 Volatiles %:	10-20 (water)
3.14 Solubility In Water:	Completely dispersible

### **4. Fire & Explosion Data:**

4.1 Means Of Extinction:	N/A (Not explosive. Not auto-flammable. Not flammable.)
4.2 Sensitivity To Mechanical Impact/Static Discharge:	N/A
4.3 Flash Point (method):	N/A (non-combustible)
4.4 Upper Flammable Limits %:	N/A
4.5 Lower Flammable Limits%:	N/A
4.6 Auto Ignition Temperature:	N/A
4.7 Fire Fighting Instructions:	N/A
4.8 Unusual Fire & Explosion Hazards:	EcoProof is a non combustible Liquid and will not burn, but may splatter if the Liquid is heated above its boiling point. Avoid heating above 200 degrees centigrade / 392 degrees Fahrenheit.

## **5. Reactivity Data:**

5.1 Chemical Stability:	Stable
5.2 Incompatible Materials:	Will react with alkaline sensitive materials such as acids and certain metals. Contact with reactive metals such as aluminium or magnesium will result in the formation of explosive hydrogen gas.
5.3 Hazardous Decomposition Products:	Avoid heating above 200°C. At elevated temperatures hazardous vapours can be released, including carbon monoxide, hydrogen chloride, organic acids and aldehydes.
5.4 Hazardous Polymerization:	Will not occur.

## **6. Health Information:**

6.1 Exposure Limit:	N/A
6.2 Inhalation:	N/A
6.3 Skin:	Adhesion
6.4 Eyes:	Adhesion & irritation
6.5 Ingestion:	Blockage of digestive system and/or respiratory tract.
6.6 Chronic Effects:	N/A

## **7. Emergency And First Aid Procedures:**

7.1 Inhalation:	N/A
7.2 Skin:	This is an alkaline product. If splashed on the skin immediately wash thoroughly with fresh water. If the product has dried on the skin massage the area with medical grade mineral oil, baby oil or edible oil, then wash with soap and water. If irritation persists seek medical attention.
7.3 Eyes:	Flush thoroughly with fresh water for at least ten minutes. Seek medical attention.
7.4 Ingestion:	DO NOT INDUCE VOMITING. Seek medical attention.

## **8. Spill Procedures:**

8.1 In The Event Of A Spill:	Dyke and contain, transfer to container for recovery or disposal. Keep out of sewers and surface water.
8.2 Disposal Methods:	Follow federal, provincial and local regulations regarding disposal.

## **9. Special Procedures:**

9.1 Respiratory Protection:	N/A
9.2 Ventilation:	N/A
9.3 Protective Gloves:	Recommended
9.4: Eye Protection:	Safety glasses or splash goggles recommended
9.5 Other protection:	Long sleeves and loose clothing recommended

## **10. Special Precautions:**

10.1 Storage & Handling Conditions:	Keep container tightly closed when not in use. Keep from freezing.
10.2 Special Shipping Info:	Not regulated by the Transportation of Dangerous Goods Regulations
10.3 Prepared By:	EcoProof Ltd
10.4 Prepared On:	28 <sup>th</sup> Sept 2004

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**PLEASE READ MATERIAL SAFETY DATA SHEET AND COSHH DATA SHEET BEFORE USING**

For full COSHH & Material Safety Data Sheets see your EcoProof specialist or visit

**1. Uses:**

EcoProof Top Coat is a cold applied membrane for waterproofing and surface protection. Its main use is to colour the EcoProof Liquid Membrane or EcoProofSpray membranes. EcoProof Top Coat, when used in conjunction with EcoProof Liquid Membrane and EcoProofSpray, can be applied over a wide range of surfaces including roofs, concrete foundations, basements, retaining walls, car parking decks, planters, valleys & guttering, plus many more. It will cover many substrates including timber, concrete, metal, asphalt, asbestos and brick.

**2. Preparation:**

- |     |   |
|-----|---|
| 2.1 | All surfaces should be dry and free from dust, grease and other debris. Any loose debris should be swept away, surfaces pressure washed and allowed to dry. |
| 2.2 | All surfaces should be structurally sound and stable before application.  |
| 2.3 | Use EcoProof Mastic Adhesive to fill smaller gaps (above 3mm). For best results build up in thin layers and allow to fully dry and cure.                    |
| 2.4 | Use EcoProof Strengthening Tape and EcoProof Mastic Adhesive to cover joints, large gaps, pipe work, 90° angles and other details.                          |

**3. Application:**

- |     |   |
|-----|---|
| 3.1 | <b>Do not</b> apply to wet or frozen surfaces, during or immediately prior to heavy rain.   |
| 3.2 | Apply the single component system with the appropriate sprayer, roller or brush.  |
| 3.3 | Apply at an ambient temperature (above 5°C)   |
| 3.4 | Apply a 0.5mm covering (0.5 litres / m <sup>2</sup> ) of EcoProof Top Coat on top of a cured 1.5mm membrane of EcoProof Liquid Membrane or EcoProofSpray. This will provide a coloured waterproof membrane. |
| 3.5 | Cures to touch in 1-4 hours (at 20°C) and is largely cured within 24 hours (1mm membrane).  |
| 3.6 | After preparation it is possible to cover areas greater than 1000 square metres per day.  |

**4. Storage And Handling:**

- |     |   |
|-----|---|
| 4.1 | Store above 5°C in a cool dry place with containers tightly fastened.                         |
| 4.2 | <b>Do not</b> allow uncured material to freeze.   |
| 4.3 | Although EcoProof Top Coat is non combustible we recommend you avoid temperatures above 200°C |



4.4	Not subject to the controlled products or the transportation of dangerous goods regulations.
4.5	Keep out of reach of children.

## 5. Spillage & Clean Up:

5.1	<b>Large spills:</b> Pump into plastic containers and rework/dispose as per local legislation. <b>Small spills:</b> Use non-combustible absorbent and shovel into a suitable container for disposal.
5.2	For general clean-ups, white spirits is recommended. For personal clean up of your hands/face, baby oil is recommended.

## 6. Limitations:

6.1	Drying and curing time will vary depending on temperature and humidity.
6.2	EcoProof Top Coat is mildly alkaline. When applying observe normal health and safety precautions.
6.3	Wear eye protection and other suitable personal protective equipment (PPE).
6.4	For further information refer to the COSHH and MSDS data sheets.

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 Tel: 01948 841018 Fax: 01948 841018

**EcoProof Top Coat** is a state of the art modified elastomeric dispersion specifically formulated to simplify the waterproofing process and overcome the problems of materials containing toxic solvents and VOC. It has been specifically formulated as a spray, roller or brush applied fully protective waterproofing membrane. The cold applied single component system can be applied using an airless spray system, roller or brush. EcoProof Top Coat allows a solvent free, quick setting membrane that provides excellent strength, elasticity and adhesion.

EcoProof Top Coat is a waterproof adhesive and so fully bonds to most substrates. The specified thickness offers a seamless, flexible and watertight membrane with low environmental impact. Use in conjunction with EcoProof Liquid Membrane or EcoProof Spray to achieve the desired protection.

**\* SOLVENT FREE \* NON TOXIC \* ODOURLESS \* NOT FLAMMABLE \***

## 7 Physical Properties – Liquid Form:

Property	Typical results
Specific gravity (liquid) kg/m <sup>3</sup> :	Approx. 1.0
Odour:	Slight
VOC:	Contains no solvents
Colour:	Various
% solids: (wt)	50-55
Viscosity, Cps (Brookfield 20 rpm, #6 spindle)	5,000-8,000
pH:	8-11

## 8 Performance – Cured Membrane Form:

Property	Typical Form
Colour:	Various
Specific gravity Kg/m <sup>3</sup> :	Approx. 1.0
Chemical resistance:	Resistant to most inorganic solutions and many organic solvents. Consult chemical resistance chart for further information.
Chemical resistance ASTM G20 10% hydrochloric acid 10% sodium hydroxide saturated lime water:	N/A
Biological resistance ASTM E154, ASTM D412:	N/A
Impact resistance CSB37-GP-500 @ 23°C, J	N/A
Impact resistance CSB37-GP-56 @ -10°C, J	N/A
Tensile strength ASTM D412 (p.s.i):	N/A
Adhesion to concrete strength ASTM C907:	N/A
Low temperature mandrel @ 25°C	N/A
Crack bridging, ASTM C836, un-aged -20°C	N/A
Crack bridging, ASTM C836, aged E20°C	N/A
Puncture resistance CGSB 37-GP-56: 24 hours @ 29N, -5°C	N/A
Water Vapour transmission ASTM E96, ng/Pa.a.s.m <sup>2</sup>	N/A
Water absorption, CGSB37 – GP – 56M, %inc	N/A
Accelerated weathering ASTM G155 D412: tensile strength, 250 hours.	Passed
Hardness (durometer type 00)	80-85



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### **1. Uses:**

EcoProof Strengthening Tape is a geotextile reinforcement tape used in conjunction with EcoProof Mastic Adhesive to prepare the surface ready for waterproofing with EcoProof Liquid Membrane or EcoProof Spray. It should be used to reinforce and cover joints, large gaps, pipe work, up-stands, 90° angles and any other detail and preparation areas.

### **2. Preparation:**

- |     |   |
|-----|---|
| 2.1 | All surfaces should be dry and free from dust, grease and other debris. Any loose debris should be swept away; surfaces pressure washed and allowed to dry. |
| 2.2 | All surfaces should be structurally sound and stable before application.  |
| 2.3 | Use EcoProof Mastic Adhesive to fill smaller gaps (above 3mm). For best results build up in thin layers and allowed to fully dry and cure.                  |
| 2.4 | Use EcoProof Strengthening Tape to cover joints, large gaps, pipe work, 90° angles and other detail.  |

### **3. Application:**

- |     |  |
|-----|--|
| 3.1 | <b>Do not</b> apply to wet or frozen surfaces, during or immediately prior to heavy rain.  |
| 3.2 | Apply a generous layer of EcoProof to the preparation area (with a trowel or brush), cut a suitable length of EcoProof Strengthening Tape and place on the EcoProof layer (fury side facing down). Press down with a clean paint brush until smooth. Then apply another generous covering of EcoProof to cover the EcoProof Strengthening Tape and smooth over with brush. |
| 3.3 | Allow to fully cure before applying final EcoProof Liquid Membrane or EcoProof Spray membrane.   |
| 3.4 | Apply at an ambient temperature (above 5°C)  |
| 3.5 | Cures to touch in 1-4 hours (at 20°C) and is largely cured within 24 hours.  |

### **4. Storage And Handling:**

- |     |   |
|-----|---|
| 4.1 | Please follow appropriate health & safety measures when handling and applying EcoProof Strengthening Tape. Follow the specified safety measures while using in conjunction with other EcoProof products |
| 4.2 | Store above 5°C in a cool dry place with containers tightly fastened.   |
| 4.3 | <b>Do not</b> allow uncured material to freeze.   |
| 4.4 |   |

4.5	Not subject to the controlled products or the transportation of dangerous goods regulations. Keep out of reach of children.
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## **5. Spillage & Clean Up:**

5.1	<b>Large spills:</b> Pump into plastic containers and rework/dispose as per local legislation. <b>Small spills:</b> Use non-combustible absorbent and shovel into a suitable container for disposal.
5.2	For general clean-ups, white spirits is recommended. For personal clean up of your hands/face, baby oil is recommended.

## **6. Limitations:**

6.1	Drying and curing time will vary depending on temperature and humidity.
6.2	Wear eye protection and other suitable personal protective equipment (PPE).
6.3	For further information refer to the COSHH and MSDS data sheets.

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<b>1. <u>Maintenance &amp; Servicing:</u></b>	EcoProof membranes offer maintenance free roofs which are not affected by the accumulation of dirt or the normal concentration of chemicals in the atmosphere.
1.1	Always ensure gutters, rainwater outlets and fall pipes are free and clear to provide adequate escape for water collecting on the roof area. Regular inspections should be carried out here to prevent damage or problems associated with water bypassing the membrane.
1.2	Periodic inspections should be carried out where possible to check for physical and mechanical damage from tradesman, vandals, falling debris etc.
1.3	

**2. Chemical Spillages:**

2.1	Solvents will attack and break down the EcoProof membrane. Where accidental spillages occur the area should be washed down thoroughly and flushed with fresh water. All traces of the solvent must be completely removed.
2.2	The damaged area should be cut out and the surface appropriately prepared. Always clean the area including at least a 150mm margin around the exposed area. Recover the area using EcoProof products (at the correct thickness, 2mm) and ensure at least a 50/75mm overlap is made onto the existing membrane.
2.3	Please refer to the Chemical Resistance Chart for a list of chemical the EcoProof system is resistant to. This list is not exclusive so if you have a query relating to chemicals and EcoProof then please contact EcoProof Ltd. (Chemical Resistant Chart sent on application).

**3. Physical & Mechanical Damage:**

3.1	Any physical or mechanical damage can be easily repaired and once cured the membrane will again offer seamless protection.
3.2	The damaged area should be cut out and the surface appropriately prepared. Always clean the area including at least a 150mm margin around the exposed area. Recover the area using EcoProof products (at the correct thickness, 2mm) and ensure at least a 50/75mm overlap is made onto the existing membrane.

#### 4. Cleaning:

4.1	The membrane does not need cleaning however if required then it may be washed using fresh water and soft brushes. Do not use chemical detergents if you are unsure about the compatibility with the membrane.
4.2	Please note although the membrane will withstand light foot traffic we do not recommend heavy foot traffic as this can increase the risk of causing physical damage to the membrane.

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Chemical Name	Formula	Concentration	Acceptability
Acetic acid	CH <sub>3</sub> COOH	10%	Limited
Acetic acid	CH <sub>3</sub> COOH	50%	Unsuitable
Aluminium chloride	NH <sub>4</sub> Cl	Saturated	Suitable
Aluminium sulphate	NH <sub>4</sub> SO <sub>4</sub>	Saturate	Suitable
Ammonium chloride	NH <sub>4</sub> Cl	Saturated	Suitable
Ammonium nitrate	NH <sub>4</sub> NO <sub>3</sub>	All concentrations	Unsuitable
Ammonium sulphate	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	Saturated	Suitable
EcoProof regia	HCl-H NO <sub>3</sub>	All concentrations	Unsuitable
Barium carbonate	BaCO <sub>3</sub>	Saturated	Suitable
Barium chloride	BaCl <sub>2</sub>	Saturated	Suitable
Barium hydroxide	Ba(OH) <sub>2</sub>	Saturated	Suitable
Barium sulphate	BaSO <sub>4</sub>	Saturated	Suitable
Borax (sodium tetraborate)	Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	Saturated	Suitable
Bromine (gas or liquid)	Br <sub>2</sub>	All concentrations	Unsuitable
Calcium carbonate	CaCO <sub>3</sub>	Saturated	Suitable
Calcium chloride	CaCl <sub>2</sub>	Saturated	Suitable
Calcium cyanide	Ca(CN) <sub>2</sub>	All concentrations	Unsuitable
Calcium hydroxide (lime)	Ca(OH) <sub>2</sub>	Saturated	Suitable
Calcium nitrate	Ca(NO <sub>3</sub> ) <sub>2</sub>	Saturated	Suitable
Calcium sulphate	CaSO <sub>4</sub>	Saturated	Suitable
Carbon dioxide (gas)	CO <sub>2</sub>	All concentrations	Suitable
Chlorine (gas)	Cl <sub>2</sub>	All concentrations	Unsuitable
Chromic acid	H <sub>2</sub> CrO <sub>7</sub>	All concentrations	Unsuitable
Copper carbonate	CuCO <sub>3</sub>	Saturated	Suitable
Copper (cupric) chloride	CuCl <sub>2</sub>	Saturated	Suitable
Copper (cupric) hydroxide	Cu(OH) <sub>2</sub>	Saturated	Suitable
Copper (cupric) nitrate	Cu(NO <sub>3</sub> ) <sub>2</sub>	Saturated	Suitable
Copper (cupric) sulphate	CuSO <sub>4</sub>	Saturated	Suitable
Corn Syrup	C <sub>6</sub> O <sub>6</sub> H <sub>12</sub>	<50% w/w	Suitable
Corn Syrup	C <sub>6</sub> O <sub>6</sub> H <sub>12</sub>	>50% w/w	Limited
Ethyl alcohol	C <sub>2</sub> H <sub>5</sub> OH	<35% w/w	Limited
Ethyl alcohol	C <sub>2</sub> H <sub>5</sub> OH	>35% w/w	Unsuitable
Glycerol	C <sub>3</sub> O <sub>3</sub> H <sub>6</sub>	<35% w/w	Limited
Glycerol	C <sub>3</sub> O <sub>3</sub> H <sub>6</sub>	>35% w/w	Unsuitable
Hydrochloric acid	HCl	35% w/w (conc.)	Unsuitable
Hydrocyanic acid	HCN	All concentrations	Unsuitable
Hydrogen (gas)	H <sub>2</sub>	All concentrations	Unsuitable
Hydrogen peroxide	H <sub>2</sub> O <sub>2</sub>	5% w/w	Limited
Hydrogen peroxide	H <sub>2</sub> O <sub>2</sub>	>20% w/w	Unsuitable
Iron (ferrous) amm. Sulphate	Fe(NH <sub>4</sub> )SO <sub>4</sub>	Saturated	Suitable
Iron (ferrous) carbonate	FeCO <sub>3</sub>	Saturated	Suitable
Iron (ferrous) chloride	FeCl <sub>2</sub>	Saturated	Suitable
Iron (ferrous) hydroxide	Fe(OH) <sub>2</sub>	Saturated	Suitable



Iron (ferrous) sulphate	FeSO <sub>4</sub>	Saturated	Suitable
Iron (ferric) carbonate	Fe <sub>2</sub> (CO <sub>3</sub> ) <sub>3</sub>	Saturated	Suitable
Iron (ferric) chloride	FeCl <sub>3</sub>	Saturated	Unsuitable
Iron (ferric) hydroxide	Fe(OH) <sub>3</sub>	Saturated	Suitable
Iron (ferric) nitrate	Fe(NO <sub>3</sub> ) <sub>3</sub>	Saturated	Unsuitable
Iron (ferric) sulphate	Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	Saturated	Limited
Magnesium carbonate	MgCO <sub>3</sub>	Saturated	Suitable
Magnesium chloride	MgCl <sub>2</sub>	Saturated	Suitable
Magnesium hydroxide	Mg(OH) <sub>2</sub>	Saturated	Suitable
Magnesium sulphate	MgSO <sub>4</sub>	Saturated	Suitable
Methyl alcohol	CH <sub>3</sub> OH	<35%	Limited
Methyl alcohol	CH <sub>3</sub> OH	>35%	Unsuitable
Nickel carbonate	NiCO <sub>3</sub>	Saturated	Suitable
Nickel chloride	NiCl <sub>2</sub>	Saturated	Suitable
Nickel hydroxide	Ni(OH) <sub>2</sub>	Saturated	Suitable
Nickel sulphate	NiSO <sub>4</sub>	Saturated	Suitable
Nitric acid	HNO <sub>3</sub>	35% w/w	Limited
Phosphoric acid (ortho)	H <sub>3</sub> PO <sub>4</sub>	75% w/w	Suitable
Potassium carbonate	K <sub>2</sub> CO <sub>3</sub>	Saturated	Limited
Potassium chlorate	KClO <sub>3</sub>	All concentrations	Unsuitable
Potassium chloride	KCl	Saturated	Suitable
Potassium citrate	K <sub>3</sub> C <sub>4</sub> O <sub>7</sub>	Saturated	Suitable
Potassium cyanide	KCN	All concentrations	Unsuitable
Potassium hydroxide	KOH	45% w/w	Suitable
Potassium perchlorate	KClO <sub>4</sub>	All solutions	Unsuitable
Potassium permanganate	KMnO <sub>4</sub>	All solutions	Unsuitable
Potassium nitrate	KNO <sub>3</sub>	Saturated	Limited
Potassium sulphate	K <sub>2</sub> SO <sub>4</sub>	Saturated	Suitable
Sodium acid phosphate	NaH <sub>2</sub> PO <sub>4</sub>	Saturated	Limited
Sodium bisulfite	NaHSO <sub>3</sub>	Saturated	Suitable
Sodium bromide	NaBr	Saturated	Suitable
Sodium carbonate	Na <sub>2</sub> CO <sub>3</sub>	Saturated	Suitable
Sodium chlorate	NaClO <sub>3</sub>	All concentrations	Unsuitable
Sodium chloride	NaCl	Saturated	Suitable
Sodium dichromate	Na <sub>2</sub> CrO <sub>7</sub>	Saturated	Suitable
Sodium cyanide	NaCN	All concentrations	Unsuitable
Sodium fluoride	NaF	Saturated	Suitable
Sodium hydroxide	NaOH	50% w/w	Suitable
Sodium hypochlorite	NaOCl	1% av. Cl <sub>2</sub>	Limited
Sodium hypochlorite	NaOCl	10% av. Cl <sub>2</sub>	Unsuitable
Sodium metasilicate	Na <sub>2</sub> SiO <sub>3</sub>	Saturated	Suitable
Sodium nitrate	NaNO <sub>3</sub>	Saturated	Suitable
Sodium nitrite	NaNO <sub>2</sub>	Saturated	Suitable
Sodium orthophosphate	Na <sub>3</sub> PO <sub>4</sub>	Saturated	Suitable
Sodium perborate	Na <sub>2</sub> B <sub>4</sub> O <sub>4</sub> .H <sub>2</sub> O <sub>2</sub>	Saturated	Suitable
Sodium perchlorate	NaClO <sub>4</sub>	All concentrations	Unsuitable
Sodium permanganate	NaMnO <sub>4</sub>	All concentrations	Unsuitable
Sodium sulphate	Na <sub>2</sub> SO <sub>4</sub>	Saturated	Suitable

Sucrose	C <sub>6</sub> O <sub>6</sub> H <sub>12</sub>	Saturated	Suitable
Sulphuric acid	H <sub>2</sub> SO <sub>4</sub>	50% w/w	Suitable
Sulphuric acid	H <sub>2</sub> SO <sub>4</sub>	93% w/w	Unsuitable

Tin (stannous) chloride	SnCl <sub>2</sub>	Saturated	Suitable
Tin (stannous) sulphate	Sn SO <sub>4</sub>	Saturated	Limited
Urea	CO(NH <sub>2</sub> ) <sub>2</sub>	Saturated	Suitable
Zinc oxide	ZnO	Saturated	Suitable
Zinc chloride	ZnCl <sub>2</sub>	Saturated	Suitable
Zinc sulphate	ZnSO <sub>4</sub>	Saturated	Suitable

#### **Additional Notes:**

1. Performance was evaluated by determining the strength of samples before and after immersion in the chemical solutions shown for 180 days at room temperature (22±3°C) according to the method described in ASTM D-412.
2. Most of the results were obtained using saturated solutions of the chemical in water. Although it may generally be assumed that a saturated solution represents the worst case, results may differ if more dilute solutions are employed.
3. Most of the chemicals listed are solutions of inorganic compounds in water. With rare exceptions EcoProof is not recommended for applications in which it is to be in contact with organic compounds such as oils or solvents.
4. The list shown is not exhaustive. Please consult with your EcoProof Technical Representative for any chemicals, or concentrations thereof which may be of interest but are not on the list.
5. EcoProof is not recommended for use with strong oxidizing agents.
6. All testing was carried using pure chemicals. In some cases the presence of even small quantities of contaminants may dramatically affect the results.
7. Please contact your EcoProof Technical Department for information about chemicals not included on this list, or if more than one chemical is present in the system.
8. "Limited" indicates that occasional contact with the chemical indicated may be tolerated but that continuous exposure is unacceptable. In cases where limited acceptability is indicated, please consult with the EcoProof Technical Department.

The information provided above was determined using EcoProof sprayed and cured using the recommended procedures.

Samples of EcoProof were immersed in the solutions shown for 90 days at room temperature (20±2°C) before examination.

The information is offered in good faith and is accurate to the best of our knowledge. Results may vary if the EcoProof is incorrectly applied or if unknown contaminants are present.

The data provides no guarantee of performance and EcoProof accepts no responsibility for any problem which might arise as a result of exposure of EcoProof to any of the chemicals described.