



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

1.1 Trade Name:	Liquidrubber Flood Coat
1.2 Application Of The Preparation:	Protective & waterproofing membrane
1.3 Supplier:	Liquid Roofing Systems LTD Prees Green Whitchurch SY132BN
1.4 Contact Tel. No.	Tel. 01948 841877

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: DO NOT INGEST	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:	Large spills: Pump into plastic containers and rework/dispose as per local legislation. Small spills: 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):	Eye protection: Safety glasses or splash goggles. Body protection: 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:	On the eye: Slightly irritating to eyes. On the skin: Slightly irritating to skin. Chronic toxicity: Repeated exposure to low levels will not cause adverse effects. Contact sensitization: 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. Do not induce vomiting. 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">Not subject to ADR/IATA/IMDG codes.Not subject to the controlled products or the transportation of dangerous goods regulations.
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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: Liquid Roofing Systems LTD
 Prees Green
 Whitchurch
 Shropshire
 SY132BN
 Tel. 01948 841877
 Fax. 01948 841854
 E-mail: info@lrs-systems.co.uk

THIS PRODUCT IS NOT SUBJECT TO THE CONTROLLED PRODUCTS OR THE
 TRANSPORTATION OF DANGEROUS GOODS REGULATION

1. Material identification:

1.1 Trade Name:	Liquidrubber Flood Coat
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:	Liquidrubber 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:	Liquid Roofing Systems Ltd
10.4 Prepared On:	28 th 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 Liquidrubber specialist or visit
www.Liquidrubber.co.uk

1. Uses:

Liquidrubber Flood Coat is a cold applied membrane for waterproofing and surface protection. Other uses include rust and corrosion protection of ferrous materials. Liquidrubber Flood Coat 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 Liquidrubber 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 Liquidrubber Strengthening Tape to cover joints, large gaps, pipe work, 90° angles and other details. |

3. Application:

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| 3.1 | Do not 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 two 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 | Do not allow uncured material to freeze. |
| 4.3 | Although Liquidrubber Flood Coat 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	Large spills: Pump into plastic containers and rework/dispose as per local legislation. Small spills: 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	Liquidrubber Flood 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.

Liquidrubber Flood Coat is manufactured exclusively for Liquidrubber LTD

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Liquid Roofing Systems, Prees Green, Whitchurch, Shropshire, SY132BN www.Liquidrubber.co.uk Email: info@irs-systems.co.uk Tel: 01948 841877 Fax: 01948 841854

Liquidrubber Flood Coat 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. Liquidrubber Flood Coat is a cold applied single component system that can be applied using an airless spray system, roller or brush. Liquidrubber Flood Coat allow a solvent free, quick setting membrane that offers excellent strength, elasticity and adhesion. Liquidrubber Flood 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.

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

1. Physical Properties – Liquid Form:

Property	Typical results
Specific gravity (liquid) kg/m ³ :	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 ³ :	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: tensile strength:	Passed (no deterioration of film) Passed (>90% original value)
Hardness (Ourometer 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