

1 Products Catalogue

- BIL Acryl Top Coat
- BIL Membrane
- BIL Fiberglass Mesh
- BIL Primer

2 Method Statement

3 Test Report

4 Safety Data Sheet

Your Local Company Details

BIL MEMBRANE

► Description

A water-based rubber modified bitumen thixotropic emulsion. It dries to form a black coating which is elastic, non-permeable to water and mild chemical solution, excellent crack bridging and weathering resistance and is odourless and taint free.

► Usage

BIL Membrane is used as followed:

- Thinned with clean water and used as primer on concrete and wooden surfaces.
- Roof waterproofing, basement tanking, floor and wall damp-proofing.
- As a binder for sand or aggregate mixes to provide flexible protective mastic or pavement.

► Technical Details

Appearance	Wet - Dark Brown Dry - Black
Chemical and Water Resistant	Resistant to water, alcohol, most salt solutions, some diluted acids and alkalis.
Consistency	Not resistant to oil, solvents and strong detergent solutions. A non-drip thixotropic paste of consistency brushing.
Cone Penetration, @ 30°C, dmm (ASTM D217)	300-375
Flexibility	Provides a firm but flexible coating within the serviced temperature range of 0°C to 50°C.
Flash Point	NO FLASH POINT. BIL Membrane is a water-based material.
Fire Resistance	Wet: Non-Flammable Dry: Will burn, but no flame spread
Heat Flow Resistance	The cured film will not flow or sag under direct sunlight.
Setting and Drying Time	Under indoor condition at room temperature of 30°C and relative humidity of 80%, a wet thickness of 0.6mm will dry in 4 hours time.

Shrinkage Factor	Approximately 45% when fully dried
Density @ 30°C, g/cc. (Density cup, 100 cc. - ASTM D1475)	0.97-1.03
Storage Life	12 months under good storage conditions and undamaged containers. The material is subject to damage by frost and should be stored at temperatures between 5°C and 40°C.
Toxicity	Non-toxic
Residue by Evaporation, % weight (ASTM D2939)	55.0-63.0
Water Vapor Transmission, g/h.m ² (ASTM E96, Water Method)	0.4
Pull-off Adhesion, N/mm ² (ASTM D4541)	0.7
Tensile Strength At Peak, MPa (ASTM D412:1998)	0.25
Elongation at Break (ASTM D412:1998)	800% to 1200%

► Application

Surface to be coated should be free from oil and loose particles. **BIL Membrane** may be applied by squeegee, brush, roller, steel trowel or spray.

Application Temperature Limits

0°C to 50°C

► Coverage

0.60 litre/m² per neat coat

► Handling Precautions

Clean hands and tools with cold water when wet and use kerosene or solvent when dry.

► Packing

20-litre pail and 200-litre drum.

DISCLAIMER

Information available in this information sheet serves as a guide to our customers. They are based on our experiences and judgements but must not be regarded as a legal warranty nor are we liable for any situation. Sunraysia Company P/L will not be responsible for the application of our products and no claims can be made in which the manufacturer's instructions have been followed.

APPLICATION GUIDE

BIL Roof Waterproofing System

► Method Statement

- 1 Surface top be applied must be dry, free from dust, laitance, loose materials, paint, grease, oil, or any other materials which may impair adhesion.
- 2 Stir **BIL Primer (S)** homogeneously and prime the surface at 0.10-0.15 litre per square meter. Allow it to dry for 1-2 hours under normal conditions.
- 3 Stir **BIL Membrane** homogeneously.
Apply 1st coat of BIL Membrane by brush or roller at a recommended amount of 1 litre per square meter. While still wet, embed a layer of **BIL Fiberglass Mesh** onto the BIL Membrane layer with brush or squeegee.
Ensure that all the edges of the **BIL Fiberglass Mesh** should be overlapped by a minimum of 50mm and maximum 100mm.
It is important that the fabric is adequately smoothed across the surface to avoid any wrinkling effect.
Allow it to dry. (Drying time is about 3-5 hours under normal conditions)
- 4 Subsequently apply a 2nd coat of **BIL Membrane** by brush or roller at a recommended amount of 1 litre per square meter laid on the right, angled to the previous coat.
Allow it to dry. (Drying time is about 3-5 hours under normal conditions)
- 5 Finally, apply 1 layer of BIL Acryl Top Coat at a recommended amount of 0.3 litre per square meter. Allow to dry.

DISCLAIMER

Information available in this information sheet serves as a guide to our customers. They are based on our experiences and judgements but must not be regarded as a legal warranty nor are we liable for any situation.
Sunraysia Company P/L will not be responsible for the application of our products and no claims can be made in which the manufacturer's instructions have been followed.

BIL FIBERGLASS MESH

► Description

BIL Fiberglass Mesh is made specially for the reinforcement of waterproofing asphalt emulsions. It has good strength and does not rot, decay or absorb moisture as do natural fibers such as hessian or cotton. It does not remove volatile oils from the medium that it reinforces. It is unaffected by micro-organisms, weathering or soil exposure, and its high tensile strength provides greatly increased resistance to cracking and ensures a considerably longer life for the protective coating.

► Uses

Roofing **BIL Fiberglass Mesh** is used with **BIL Membrane** in the waterproofing of new roofs, re-roofing and also repair of old roofs or leaking gutters. It reinforces and protects coating used in building construction, foundation, and subway walls.

It can be applied over the surface of a roof, within gutters and in the angle of all upturn such as parapet walls.

► Surface Preparation

Remove all moss, dirt and loose matter. Prime surface with **BIL Primer** at 0.10-0.20 liters per square meter.

► Application

Apply one coat of BIL Membrane by brush or by roller over the primed surface. While still wet, embed a layer of BIL Fiberglass Mesh onto the BIL Membrane layer with brush or squeegee. Ensure that all the edges of the BIL Fiberglass Mesh should be overlapped by a minimum of 50mm to a maximum of 150mm.

It is important that the fabric is adequately smoothed across the surface to avoid any wrinkling effect. Allow to dry. (Drying time is about 3.5 hours under normal conditions)

► Safe Handling Precautions

Flammability : Non-flammable

Skin Contact : Does not have any effect on sensitive skin

DISCLAIMER

Information available in this information sheet serves as a guide to our customers. They are based on our experiences and judgements but must not be regarded as a legal warranty nor are we liable for any situation. Sunraysia Company P/L will not be responsible for the application of our products and no claims can be made in which the manufacturer's instructions have been followed.

BIL PRIMER (S)

► Description

BIL Primer (S) is a low viscosity bituminous solution. It is highly penetrative and has good adhesion to most surfaces.

► Usage

BIL Primer (S) is used for priming of surfaces such as concrete, brick, bitumen felt, mastic asphalt, metal and timber, prior to the application of bituminous coating or membrane.

► Technical Details

Appearance	It is dark brown to black solution and it gives a black coating on drying
Adhesion	It has good adhesion to most surfaces, eg. cement-asbestos, ferrous metals, slight etched zinc and etc.
Chemical And Water Resistance	Resistant to water, diluted acids and alkalis. Not resistant to oil and solvent.
Viscosity, flow time at 30°C, seconds, (BS3900 Type "B" 4 Cup)	100-140
Flashpoint	Approximately 45°
Flexibility	The drying coating may be bent on a 6mm mandrel through 180° without cracking or loss of adhesion. (BS 3416:1991, clause 9-Appendix B(B.5); Method - BS 3900:Part E1)
Heat Flow Resistance	The cured film will not flow or sag under direct sunlight
Shrinkage Factor	Approximately 41% when fully dried
Density @ 30°C, g/cc (Density cup 100c.c. - ASTM D1475)	0.87-0.93
Nonvolatile Content, %weight, (ASTM D1644, Method B)	Minimum 50
Toxicity	Non-toxic
Storage Life	12 months under good conditions in sealed containers. Store in tightly closed containers under cover and in accordance with the Highly Flammable Liquids Regulations, away from sources of heat and ignition.

► Application

The surface must be clean, dry and sound. A thin coat is to be applied by brush or spray. Allow to dry completely before overcoating.

► Application Temperature Limit

0°C - 50°C

► Coverage

Apply one coat at 0.10 to 0.20 litre per m² depending on porosity of base.

► Handling Precautions

Clean hands and tools with kerosene or solvents.

► Packing

20-litre pail and 200-litre drum.

DISCLAIMER

Information available in this information sheet serves as a guide to our customers. They are based on our experiences and judgements but must not be regarded as a legal warranty nor are we liable for any situation. Sunraysia Company P/L will not be responsible for the application of our products and no claims can be made in which the manufacturer's instructions have been followed.

BIL ACRYL TOP COAT

► Description

BIL Acryl Top Coat - Water based membrane containing an integral linear synthetic micro reinforcement, specifically designed to eliminate blistering and wrinkling which may occur in exposed or ponded situation. Improved version of polymer ensures higher tensile strength and durability of coating.

► Product Features

- Environmentally safe - Non-Toxic
- Tough and durable
- Elastic and flexible
- UV Resistant and waterproof
- Resistant to fungi and algae growth

► Application Method

Surface to be applied should be clean, dry and free of all surface coatings and contaminates.

All joints should be sealed with suitable sealant.

Apply ONE coat of **BIL Acryl Top Coat** by brush or roller at a recommended amount of 0.3 litres per metre square.

* Coverage will vary according to the surface profile and porosity of substrate.

► Cleaning of Tools

Thoroughly clean all tools and equipment with water after use.

► Technical Characteristics

Solid Content	> 65%
Specific Gravity	1.3
Adhesion to Concrete Substrate (ASTM D 4541 : 2002)	0.9 N/mm ²
Elongation At Break (ASTM D 412 : 1998a (2002))	100%
Tensile Strength (ASTM D 412 : 1998a (2002))	2.6 N/mm ²
Hardness (Shore A) (ASTM D 2240 : 2002)	80
Crack Bridging (BTD/TP/03:2004)	PASSED, No cracks
Accelerated Weathering (2000 hrs) (ASTM G 154 : 2000)	PASSED, No cracks

Colour : GREY

Packing : 20 litres pail

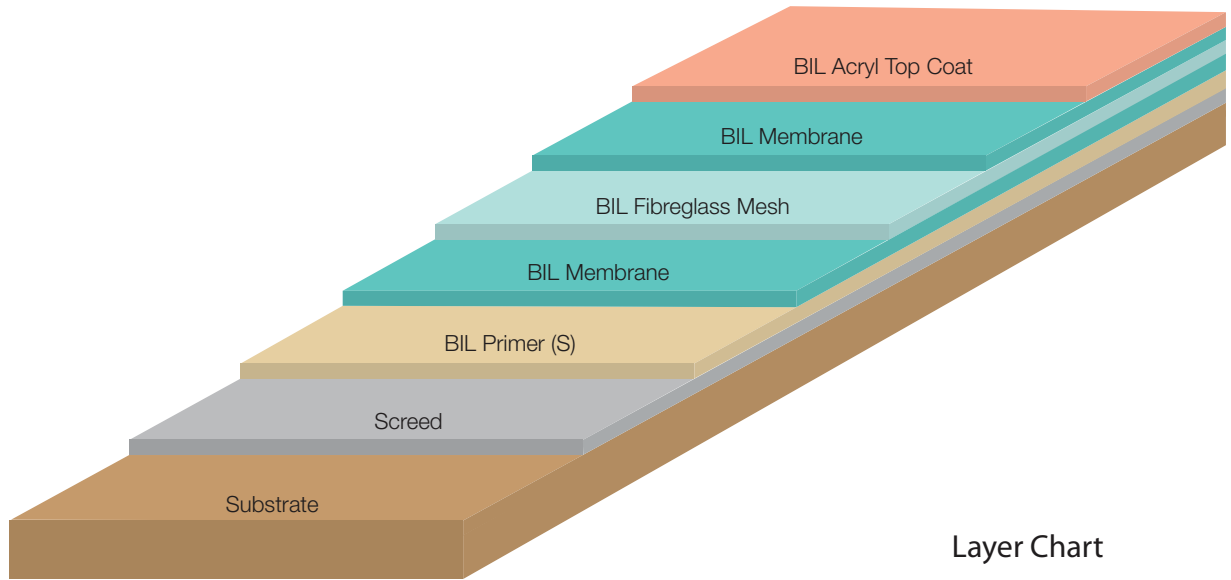
► Storage

BIL Acryl Top Coat should be stored at room temperature. Keep the product out of direct sunlight. make sure these conditions are maintained and the product packaging is unopened, then a shelf life of one year can be expected.

DISCLAIMER

Information available in this information sheet serves as a guide to our customers. They are based on our experiences and judgements but must not be regarded as a legal warranty nor are we liable for any situation. Sunraysia Company P/L will not be responsible for the application of our products and no claims can be made in which the manufacturer's instructions have been followed.

BIL ROOF WATERPROOFING SYSTEM



Layer Chart