

# 3, Rothwell Street, Timaru, South Canterbury

Email; ideaslab64@gmail.com: Phone +64 3 688 5508 or 0275 239888

# **ECO-SEAL 100**

Two Pack Flexible Self Priming high hysteresis waterproofing membrane designed for on-site application to roofs, gutters, decks and non permeable wall applications that require toughness, UV stability and a high degree of protection from water ingress.

# ECO-SEAL100 is a zero VOC coloured product suitable for most substrates.

**Intended Uses** To provide up to twenty years protection as a waterproofing membrane that will accept reasonable foot traffic when used as part of a complete waterproofing system in exterior environments. Applied to roofs, gutters, decks, bridge structures and other structural elements where a hard, tough, resilient, UV stable and corrosion resistant high build membrane is needed.

### Practical Information for ECO-SEAL100

Colour White, Grey, (large orders can be manufactured to colour)

Gloss level Medium gloss

Volume Solids >99%

Typical Thickness 1000 - 2000 microns dft per coat

1000 -2000 microns wet

Theoretical

Coverage 1 m<sup>2</sup> / litre at 1000 microns dft

Application Airless spray, brush, roller

(1000 micron DFT of ECO-SEAL 100 represents 10 years durability for the protection of substrates.)

# **Drying Time**

Temperature °C Touch dry		Hard dry	Over coating time	
10°C	3 hrs	6 hrs	16 hrs	
20°C	1.5 hrs	4 hrs	12 hrs	
25°C	1 hrs	3 hrs	6 hrs	

All drying time data is quoted on a wet film thickness of 1000 microns and assumes good airflow and humidity.

# **Regulatory Data**

Flash Point >100°C

Product density 1.26 Kg/L

VOC <1.0g/L

# **Surface Preparation**

See guide Specifications for detailed information.

**All surfaces to be coated should be clean, dry and sound**. Prior to coating application, all steel surfaces should be assessed and treated in accordance with ISO 8504:2000.

ECO-SEAL 100 may be applied over, steel, concrete, oxidized galvanized metal, oxidized colour steel, butyl rubber (when cleaned thoroughly and wiped with DMF), STPU and STPE sealer coats when used as waterproofing membranes and properly installed, fiberglass, acrylics, aluminum, dry timber and PVC. **IMPORTANT** (some of these substrates may require a primer which will only be recommended by manufacture) If any doubt over suitability of a substrate for ECO-SEAL 100, it is highly recommended to do a test area and an adhesion test after 24 hours of product curing.

**Application** Mixing: This material is a two component coating system and should always be thoroughly mixed before application in the correct ratio.

Mix Ratio 10.Kg of Part A (Base) to 6.3Kg of Part B (Hardener) –may be

diluted to application viscosity after mixing both components.

Using diluents only supplied by manufacture.

Airless

Spray Tip Size- 629 @ 3000 psi

Brush Suitable for small areas – several coats are typically needed to

achieve the required minimum 1000-micron dft.

Roller For roller application use a 8mm nap roller to cover 15  $m^2$  per . . . coat/kit – giving a DFT of 800 microns per coat. Minimum of 2 . . . coats will be required to achieve the minimum requirement of 1000 . micron DFT

Thinner Special DMF blend

Clean up PMA Solvent

Pot life Once mixed ECO -SEAL 100 will remain workable for 60 – 90 minutes,

mix in the supplied containers to avoid seeding of the product with

partially cured material.

Work Stoppages: Do not allow material to remain in hoses or spray equipment for more than 60 minutes.

All unused material should be stored in tightly closed containers.

Use a FIFO stock control.

Clean up Clean all equipment immediately after use. It is good working practice to periodically flush out spray equipment during the course of the day.

All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislations.

### Product

Characteristics Eco-Seal 100 should be stored in dry conditions above 5°C. For optimum application and drying characteristics the substrate and the air should be greater than 10°C and relative humidity between 50 and 85%. Good airflow and ventilation should be maintained to improve curing and recoat properties and speed up application.

Discard frozen (crystallized) ECO-SEAL 100 in accordance with local disposal regulations.

Surface temperature should always be 3°C above the dew point. In line with best painting practice, application should not take place in conditions which are deteriorating i.e. the temperature is falling, or inclement weather is imminent. ECO -SEAL100 is rain fast after 2 hours at 20°C.

The finished appearance of ECO-SEAL 100 is dependent on application method. For visible areas spray application is preferred, which can provide a smooth finish.

Higher decorative finishes may require additional preparation before application of topcoats.

ECO-SEAL 100 may be used to fill voids and screw holes, as it does not have solvents to create air bubbles when curing.

### Safety

**Precautions** ECO-SEAL 100 is intended for use only by certified professional applicators in industrial situations in accordance with industry best practices.

All work involving the use and application of this product should be performed in compliance with all relevant National Health, Safety and Environmental standards and regulations.

Pack Sizes 10 kg Volume Part A (Base)

6.3 kg Volume Part B (Hardener)

16.3 kg Weight

Shelf life = 12 months in original unopened packaging

# **PHYSICAL PROPERTIES**

Abrasion Resistance ASTM D4060 0.14g/1000 cycles

Bond Strength ASTM D4541 12.7 MPa on STPU, oxidized

galvanizing and marine grade ply

Elongation ASTM D4541 300 %

Durometer Hardness ASTM D2240 >100 Shore D

Impact Resistance ASTM D2794 18Nm@2mm

UV resistance ASTM D2565 Less than 1% change in gloss or

elongation after 18,000 hours . . .

accelerated testing

Scratch Resistance ASTM D1242 0.03mm after loading removed.

. 60s.

Chemical Resistance ASTM D543 Excellent against acids, alkalis, . . .

petroleum spirits, cleaning . . . .

chemicals and agrochemicals.