

OPTISEAL S

Optima Coating's OPTISEAL S is a polyurethane sealer, which forms a waterproof and flexible film with exceptional strength and elasticity. OptisealS is single-component, ready to use and easy to apply. OptisealS is ideal for use as a waterproofing sealer for use under tiles and in various roofing applications.

Colour: White

PRODUCT USES

OptisealS can be applied to: wood and fiberglass without a primer. Duratop Universal Epoxy primer, Duratop Primer WB or various other Optima Coatings primers are recommended for power-floated concrete, brick, PVC/EPDM Membranes, metals, bitumen membranes and aluminium. Consult our technical team for advice on other substrates.

OptisealS can be used for:

- Sealing roof fixtures such as skylights and solar panels.
- Flat roofs.
- Water tanks.
- Ponds and water-features.
- Balconies and decks.
- Gutters.
- Roof joints and screws.
- Sealing around doors and window frames.
- Showers.

Any other area where a strong waterproof sealer is required.

ADVANTAGES

- Easy to apply direct from can.
 - Provides water vapour permeability
 - Maintains its mechanical properties over a temperature span of -30°C to 115°C.
 - Tough and flexible.
 - Durable polyurethane compound.
 - Prevents rust and corrosion.
 - Impact and abrasion resistant.
 - High adhesion.
 - Can be overcoated or repaired.
- Available in white only.

COVERAGE

- 1.45 - 1.75 m² per litre per coat. Applied in a 2 coat application. Final dry film thickness of 1000 - 1200 microns (1 – 1.2mm).
Product can be applied thicker in high wear areas and used in conjunction with Opti Re-Inforcing membrane embedded into the first layer.

SURFACE PREPARATION

- Substrates differ significantly, and so all new applications should be tested first.
- Ensure all substrates are thoroughly clean, sound, dry and free from any contaminants such as dirt, rust, salt, algae and grease.
- Alkyd, epoxy and polyurethane primers can be used with OptisealS.
- Steel and Aluminium: Remove surface rust with a light sandpaper or wire brush. Clean thoroughly with Xylene and allow to dry thoroughly. If no primer is going to be applied an adhesion test must first be done to ensure adhesion, as mild steel may not require an etch primer; all other metals require a suitable metal primer from Optima Coatings such as OPTIPRIME ETCH or OPTIGUARD UNIVERSAL EP.
- Motor Vehicles and Painted metal: Remove heavy dirt and rust. All surfaces must be cleaned using xylene, acetone or an alkaline domestic detergent. All previously painted surfaces need to be lightly abraded using a scouring pad or medium grit sandpaper leaving no glossy area. Clean away sanding dust using xylene. Allow the surface to dry thoroughly. Borders and areas not to be coated must be masked off. Remove masking tape immediately after applying the second or final coat. If the tape sticks, cut with a knife.
- Galvanized steel: Clean metal with a suitable galvanized cleaner, OPTIGALVE ETCH. Allow to dry thoroughly. Prime with a suitable etch or galvanized primer such as OPTIGUARD UNIVERSAL EP.
- Concrete: Allow new concrete at least 28 days to cure. Remove any sealers or release agents. Clean away any oil and grease with a suitable degreaser. Glossy or floated surfaces need to be etched with a suitable acid wash, grinded or shotblasted to remove surface contaminants and open pores in the concrete. Clean surface with water and allow to dry thoroughly. Prime concrete surfaces with DURATOP PRIMER WB or DURATOP DPM PRIMER being epoxy primers in order to consolidate the concrete and create a dry surface for the application of OptisealS and ensure good adhesion. In the absence of such a primer ensure that the concrete is dry, and ensure penetration of the first coat of OptisealS by thinning with 10% xylene if necessary.
- Wood: Abrade, clean and dry the surface before applying OptisealS directly - dilute the first coat with 10% xylene to aid penetration.
- Self-Adhesive and torched on Bitumen Membranes (APP/SBS): Liquify surface by using a blow torch and cast 0.5mm – 0.8mm silica sand onto the surface and blind to refusal. Sweep sand prior to applying OptisealS. Alternatively on aged membranes apply DURATOP PRIMER WB and conduct an adhesion test.
- Fibreglass: Abrade well, solvent wipe and apply OptisealS directly onto the surface.
- PVC: Abrade and clean well using xylene. Allow to dry. Apply OptisealS directly. An adhesion test is recommended prior to use.
- Rubber (nitrile or chloroprene): Abrade and clean well using xylene. Allow to dry. Apply OptisealS directly. An adhesion test is recommended prior to use.
- Gloss Paints and Varnish: Abrade to remove all gloss, wipe with a solvent, allow to dry and apply OptisealS directly
- Glazed tiles: Glazed tiles must be cleaned and treated with Duratop Primer (an organosilane) for adhesion of OptisealS.

APPLICATION

- Ensure substrates have been prepared; tests for adhesion completed and areas not to be coated have been masked off.
- Take care when opening pails as contents may be under pressure.
- Stir before use using a flat paddle.
- Spray: not recommended for spraying.
- Brush: OptisealS should be "laid" onto the surface with a brush (do not brush backwards and forwards as with an enamel paint). Two coats will result in a final dry film thickness of ~1mm. Second or subsequent coats should be applied at right angles to the previous coat.
- Roller: Mohair Roller.
- Curing time: OptisealS cures with atmospheric moisture. The coating can be overcoated after 4 hours at 20°C at 50% relative humidity. Light traffic can be allowed after 36 hours. OptisealS achieves full strength and chemical resistance in 5 to 7 days, but normally coating can be put to use after 48 hours.
- If OptisealS is left for more than 24 hrs after coating, it should be solvent-wiped before recoating to aid intercoat adhesion.
Touch-up and repair: OptisealS can easily be repaired or overcoated. The old surface should be well cleaned and then abraded by wire brush or sandpaper, damaged surfaces must be cut out to provide an area without loose edges.

CLEANING

- Hands and equipment can easily be cleaned with xylene after the drying time but before final cure.
- Acetone can also be used for cleaning but not for dilution.
Use hot soapy water to clean the coating.

IMPORTANT

- Do not clean surfaces with lacquer thinners or other alcohol-containing solvents.
- Do not thin with any solvent containing water or alcohols. Xylene is recommended as an appropriate thinning agent.

- On substrates likely to exhibit outgassing apply during falling ambient and substrate temperatures. If applied during rising temperatures 'pin holing' may occur from rising air.
- Do not apply close to air intake vents or near running air conditioning units.
- Areas with high movement and irregular substrates require a complete layer of Opti Re-inforcing membrane embedded in the first coat of Optiseal S.
- Protect Optiseal S from moisture and do not expose unopened cans to temperatures above 50°C.

SAFETY PRECAUTIONS

- Optiseal S is highly flammable in its wet state due to its solvent content. Use extinguishing powder, CO₂ or halogens to extinguish in case of emergency.
 - Remove any overspray immediately; Optiseal S is very difficult to remove once cured.
 - Ensure good ventilation to prevent build-up of flammable solvents.
 - Wear goggles and rubber gloves. Optiseal S White bonds to the skin and can only be removed with a pumice stone.
 - Skin contact: Wash thoroughly with soap and water.
 - Eye contact: Flush immediately with water for 10 – 15 minutes and contact a physician.
 - Respiratory problems: Remove affected person to fresh air immediately and contact a physician.
 - Not for internal consumption.
- If swallowed, contact a doctor or poison control centre immediately. Do not induce vomiting. Drink water.

TECHNICAL DATA

Pack size	6Kg and 25Kg		
Finish:	Gloss		
Colour:	White		
Tinting:	not recommended.		
Viscosity:	2000 – 3000cP @ 23°C.		
SG:	1.40 – 1.45Kg/L		
Volume solids:	86%		
Weight solids:	88%		
VOC (EPA method #24):	174g/l		
Shelf life	18 months unopened. Store indoors at 5 to 35°C.		
Thinning/clean up	Optima Xylene		
Flash point	27°C		
Storage	Cool, dry area below 25°C		
Tensile strength at break	5MPa (ASTM D638)		
Elongation at break	600% (ASTM D638)		
Service temperature	-30°C to 115°C		
Abrasion resistance (Taber)	30.5 mg loss (ASTM D4060, 1000 cycles, 1000g load)		
Minimum heat softening temperature	110 Degrees Celsius		
Exterior durability	up to 10 years depending on conditions		
Recommended spreading rate per coat:	1,45 - 1,75m ² per litre per coat		
Wet film thickness:	Minimum:580 and Maximum 690 microns		
Dry film thickness:	Minimum:500 and Maximum 600 microns		
Drying schedule @ 425 microns wet	@ 10°C	@ 20°C	@ 30°C
Tack free time	6 hours	4-5 hours	4 hours
Light traffic	60 hours	48 hours	36 hours
Full traffic	5 days	4 days	3 days
Full cure	5-7 days depending on conditions		
To recoat:	4 - 5 hours		

Technical S Whites above are provided in good faith. We are an ISO 9001: 2008 registered company and our products are manufactured to the highest standards using raw materials of superior quality. Consequently we believe in the quality of our products and will willingly replace any product in the unlikely event of a quality related performance failure. Whilst we are confident in guaranteeing the quality of our products, we cannot however accept any liability for performance failure due to the incorrect application of our products. Correct application is critical to the successful performance of our products and as this process falls outside of our control we are unable to cover the application under

our product performance warranty. Where there are doubts, it is recommended that the user conduct their own suitability tests before use. To retain sheen and colour consistency of your paint, always make sure that the batch numbers are the same on all paint containers that you purchase.

DISTRIBUTED BY: OPTIMA COATINGS (PTY) LTD

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