Optima COATINGS

DATA SHEET

WATERPROOFING

OPTISEAL PU CLASSIC

Optima Coating's OPTISEAL PU CLASSIC is a polyurethane topcoat, which forms an abrasion and weather resistant film with exceptional strength and elasticity. OptisealPU CLASSIC is single-component, ready to use and easy to apply. OptisealPU CLASSIC is ideal for use as a weather-resistanttopcoat over waterproofing, an abrasion resistant flooring material and a coating for all other outdoor areas where a weather-resistant seamless coating is required.

Colour: Light Grey and White

PRODUCT USES

OptisealPU Classiccan 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.

OptisealPU Classiccan 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 topcoat is required.

ADVANTAGES

- Easy to apply direct from can.
- Attractive glossy finish.
- Provides water vapour permeability
- Maintains its mechanical properties over a temperature span of -30ºC to 115ºC.
- Tough and flexible.
- Durable polyurethane compound.
- Prevents rust and corrosion.
- Excellent UV and weather resistance.
- Impact and abrasion resistant.
- High adhesion.
- Can be overcoated or repaired.

Available in a limited range of colours.

COVERAGE

- 1.4 - 1.7m² 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.

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 OptisealPU Classic.
- 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.
- 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. Allow to dry thoroughly. Prime with a suitable etch or galvanized primer.
- 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 an epoxy primer in order to consolidate the concrete and create a dry surface for the application of OptisealPU Classic 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 OptisealPU Classicby thinning with 10% xylene if necessary.
- Wood: Abrade, clean and dry the surface before applying OptisealPU Classicdirectly - 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 OptisealPU Classic.
- Fibreglass: Abrade well, solvent wipe and apply OptisealPU Classic directly onto the surface.
- PVC: Abrade and clean well using xylene. Allow to dry. Apply OptisealPU Classic directly. An adhesion test is recommended prior to use.
- Rubber (nitrile or chloroprene): Abrade and clean well using xylene. Allow to dry. Apply OptisealPU Classic 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 OptisealPU Classicdirectly
- Glazed tiles: Glazed tiles must be cleaned and treated with Duratop Primer (an organosilane) for adhesion of OptisealPU Classic.

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: OptisealPU Classicshould 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 ~1 – 1.2mm. Second or subsequent coats should be applied at right angles to the previous coat.
- Roller: Mohair Roller.
- Curing time: OptisealPU Classiccures with atmospheric moisture. The coating can be overcoated after 3½ - 4 hoursat 20°C at 50% relative humidity. Light traffic can be allowed after 6 hours. OptisealPU Classic achieves full strength and chemical resistance in 4 to 7 days, but normally coating can be put to use after 24 hours.
- If OptisealPU Classicis left for more than 24 hrs after coating, it should be solvent-wiped before recoating to aid intercoat adhesion. Touch-up and repair: OptisealPU Classiccan 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.
- 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, irregular substrates, cracks, expansion joints, parapet walls, vertical wall/floor joints, drainage areas, roofing attachment areas require a complete layer of Opti Re-inforcing membrane embedded in the first coat of Optiseal PU Classic.
- Do not thin with any solvent containing water or alcohols. Xylene is recommended as an appropriate thinning agent.
  Protect OptisealPU Classic from moisture and do not expose unopened cans to temperatures above 50°C.

SAFETY PRECAUTIONS

- OptisealPU Classicis 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; OptisealPU Classicis very difficult to remove once cured.
- Ensure good ventilation to prevent build-up of flammable solvents.
- Wear goggles and rubber gloves. OptisealPU Classicbonds 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:	Light Grey and White		
Tinting:	Only with urethane grade pigments.		
Viscosity:	3000 – 3500cP @ 25°C.		
SG:	1.350 – 1.400Kg/L		
Volume solids:	85%		
Weight solids:	87%		
VOC (EPA method #24):175g/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	5.1MPa (ASTM D638)		
Elongation at break	675% (ASTM D638)		
Service temperature	-30°C to 115°C		
Abrasion resistance (Taber)	30.5 mg loss (ASTM D4060, 1000 cycles, 1000g load)		
Accelerated weathering	No change after 2000 hours QUV		
Minimum heat softening temperature	110 Degrees Celsius		
Exterior durability	~10 years depending on conditions		
Recommended spreading rate per coat:1.4 - 1.7m² per litre per coat			
Wet film thickness: Minimum:590 and Maximum 710 microns			
Dry film thickness:	Minimum:500 and Maximum 600 microns		
Drying schedule @ 425 microns wet	@ 10°C	@ 20°C	@ 30°C
Tack free time	5 hours	3 hours 30 mins	3 hours
Light traffic	18 hours	12 hours	6 hours
Full traffic	48 hours	36 hours	24 hours

Full cure	4-7 days depending on conditions
To recoat:	3½ - 4 hours

Technical PU Classics 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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