

Duratop Primer

Optima Coatings Duratop Primer is a clear, single component primer treatment, which can be used to prepare inorganic surfaces for the subsequent adhesion of Optima Coatings polyurethane floor coatings.

Colours: Clear

PRODUCT USES

- Optima Coatings Duratop Primer ensures excellent adhesion of Optima Coatings polyurethane floor coatings to inorganic surfaces such as marble, glazed tiles, glass, aluminium, mild steel, stainless steel, most other metals and some plastics.
- Essential for the application of clear non-slip or clear smooth versions of Optima Coatings polyurethane coatings to substrates which generally don't allow adhesion.

ADVANTAGES

- Does not acid etch the surface.
- Can be used on a multitude of inorganic surfaces.
- Provides superior adhesion without damaging the surface or changing it's appearance dramatically.
- Does not create a film that could discolour, but changes the surface by attaching an organic molecule which can subsequently react with urethane.
- Safe and easy to use.

COVERAGE

- 10m² per litre per coat. Applied in a 1 coat application. Coverage will vary depending on the porosity and profile of the surface.

SURFACE PREPARATION

- Ensure all substrates are thoroughly clean, sound, dry and free from any contaminants such as dirt, salt, algae and grease. This may be achieved by wiping with xylene or cleaning with soapy water. Dry the surface thoroughly.
- Aluminium should be lightly abraded first to remove the oxide layer and then solvent wiped. The primer and first coat must be applied within 2 hours to prevent the oxide layer re-forming.
- A fully decontaminated surface will show a water 'break-free' surface. The presence of oils on the surface will cause the primer to retreat. If this effect is observed, the surface must be cleaned again and the primer re-applied.

APPLICATION

- Using gloves and eye protection, apply Optima Coatings Duratop Primer using a clean and dry paintbrush or roller. Duratop Primer may also be sprayed using conventional spray equipment for low viscosity liquids.
- It is not necessary to thin the product. Use straight from the tin. Avoid using other containers, which may be contaminated.
- Create a film of Duratop Primer on the substrate and allow to dry (20 minutes.) Re-apply to any areas, which have been avoided due to surface tension.
- If problems persist in wetting a certain area it may still be contaminated with oil. Clean again and re-apply. Duratop Primer does contain a wetting agent and surface tension effects are not expected on an oil-free surface.
- Drying time: Duratop Primer evaporates rapidly in a thin film and will be dry and ready for over coating after 20 minutes at all conditions of temperature and humidity.
- Over coating window: Once treated (as demonstrated by a slight matting of the surface) the surface must be painted within 6 hours. If this window is exceeded, reapply the treatment.

CLEANING

- Spills should be absorbed into paper or rags and disposed of in a land-fill site.
- Brushes can be merely dried and re-used.
- There is no sticky resin component, treat as per solvent.

IMPORTANT

- Optima Coatings Duratop Primer contains water and alcohols. Do not allow contamination of reactive urethane with it. A rapid development of heat and pressure will result. In addition, the ability of the urethane to cure may be reduced.
- Duratop Primer produces some self-polymerisate that is evident in the form of a powder left on the surface and some solid material on the bottom of the tin. This is inherent and does not reduce the functioning of the product.
- Opened tins of Duratop Primer should not be stored for any extended length of time as solidification occurs.
- Duratop Primer may have reduced active ingredient if there is excessive self-polymerisate evident, but will still function. In such a case, simply use more primer.
- Duratop Primer produces a surface whereby hydrogen atoms already present on the surface are modified by the attachment of a single, covalently bonded organosilane molecule. The organic part of this molecule is then available for reaction with Optima Coatings polyurethane coatings. Duratop Primer is therefore only one molecule thick and is not visible to the naked eye. The matting effect or the powder that is sometimes visible is self-polymerisate.
- The self-polymerisate powder does not need to be removed prior to application of the urethane. It will be compounded into the urethane and will not be visible.

SAFETY PRECAUTIONS

- As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs.
- Treat splashes to eyes and skin immediately by rinsing affected area with water.
- If accidentally ingested, seek medical attention.
- Extinguishing media: extinguishing powder, CO₂ or halogens.
- Reseal containers after use.
- Use in well ventilated areas and avoid inhalation.

TECHNICAL DATA

Pack size	1 litre, 4 litre			
No of components	1			
Drying time	<20 minutes (at 25°C and 50% relative humidity)			
Overcoating Time	30 minutes (at 25°C and 50% relative humidity)			
Percentage solids	zero			
Percentage VOC	≤400 g/l			
Service temperature	-30°C to 100°C			
Application temperature	10°C to 35°C			
Specific Gravity	0,84 g/cm ³			
Viscosity	1-5 cP at 23°C			
Flash point	>200°C			
Hazardous reactions	Exothermic reaction with isocyanates. May react with water under basic or acidic conditions to form a gel.			
Toxicity	Low			
Thinning	Not required			
Shelf life	18 months			
Storage conditions	Cool dry place below 25°C			
	10°C	7 hours	20 hours	7 hours
	20°C	4 hours	16 hours	4 hours
	40°C	1 hour	4 hours	1 hour

Technical details 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.

Updated: July 2013 (this supercedes all previous publications)