

# Protectakote Clear Urethane Primer

Protectakote Clear Urethane Primer is a single component aliphatic polyurethane primer, which is used to seal, consolidate and prime porous surfaces such as concrete and wood prior to application of a polyurethane coating.

## PRODUCT USES

- Used to seal, consolidate and prime porous surfaces such as concrete and wood prior to application of a polyurethane coating

## COVERAGE

- Maximum 7m<sup>2</sup> per litre.
- Alternatively >1.5 litres are required for every 10 square meters.

## COLOURS

- Clear

## ADVANTAGES

- Thin enough to penetrate extremely dense or power-floated concrete.
- Made from aliphatic urethane and therefore will not yellow, discolour or degrade from UV penetration when used with clear topcoats. It may therefore be used on both interior and exterior surfaces.
- Does not acid etch the surface and therefore can also be used on aesthetically pleasing substrates where it will provide enhanced adhesion without matting or otherwise damaging the surface.
- Has sufficient strength and abrasion resistance to be used as a sole coating in trafficable areas.
- Remains flexible at temperatures as low as -40°C and therefore is the only type of primer suitable for use in blast freezers and refrigeration rooms.
- Provides a moisture barrier, which will prevent subsequent urethane coatings from developing a loss of clarity or pinholes.
- Seals porous substrates such that gases cannot escape and produce bubbles in the topcoat.

## SURFACE PREPARATION

- Ensure surfaces are clean and free of dust and dirt.
- Wipe surfaces with an alcohol/water-free solvent such as xylene.
- **Concrete:** ensure that the concrete is dry, and ensure penetration of Protectakote Clear Urethane Primer. To aid penetration, concrete should be acid etched or shotblasted to remove surface contaminants and open pores in the concrete. Always neutralise acids before proceeding. Oils and grease will prevent adhesion and must be removed.
- **Wood:** Abrade, clean and dry, then apply.

## APPLICATION

- Ensure substrates have been well prepared; tests for adhesion completed if necessary and areas not to be coated have been masked off.
- Protectakote Clear Urethane Primer can be sprayed or applied by brush. Rollers are not recommended as they may introduce air bubbles into the coating.
- It should not be necessary to thin the product, however if this becomes necessary use up to 5% of xylene. Do not use any solvent containing water or alcohols.
- It is important to apply only very thin coats, ensuring the entire surface is completely covered. Excessive thickness will result in some loss of clarity and possible pinholing.
- **Drying time:** Protectakote Clear Urethane Primer cures with atmospheric moisture and is temperature sensitive.

- **Overcoating:** Protectakote Clear Urethane Primer may be overcoated while the product is still slightly tacky. Check that no solvent odour remains and that the product is sufficiently firm. If Protectakote Clear Urethane Primer has cured for more than 24 hrs, check that no contaminants have landed on the film.

### CLEANING

- Spills and brushes can be easily cleaned with xylene within a few hours of use.
- To remove cured product use either a methylene chloride-based paint stripper or a wire brush attachment on a drill.

### IMPORTANT

- Protectakote Clear Urethane Primer does not adhere to aluminium, stainless steel, polyethylene(PE) and polypropylene(PP).
- Do not thin with any solvent containing water or alcohols. Xylene is recommended as an appropriate thinning agent.
- Alcohols prevent the product from curing and are present in solvents like turps and thinners.
- If surfaces with are cleaned with Lacquer thinners, ensure drying is complete before application. The alcohols in Lacquer thinners will prevent curing if not fully evaporated.

### SAFETY PRECAUTIONS

- **Protectakote Clear Urethane Primer is highly flammable in its wet state due to its solvent content, observe all fire precautions.**
- **Remove any overspray immediately; Protectakote Clear Urethane Primer is very difficult to remove once cured.**
- **Ensure good ventilation to prevent build up of flammable solvents.**
- **Protect from moisture and do not expose unopened cans to temperatures above 50°C.**
- **Wear goggles and rubber gloves. Protectakote Clear Urethane Primer bonds to the skin and can only be removed with a pumice stone.**
- **Spillage/leakage: Do not empty into drains; keep away from sources of ignition. Ensure ventilation in working area. Take up with absorbent material. Fill into sealable containers.**
- **Extinguishing media: extinguishing powder, CO<sub>2</sub> or halogens.**
- **Eye contact: rinse with water.**
- **Skin contact: wash with soap and water.**
- **Should Protectakote Clear Urethane Primer be swallowed seek medical advice.**

## TECHNICAL DATA

<b>PACK SIZE</b>	1 litre, 4 litre		
No of components	one		
Touch drying time	~3 hours at 20°C and 50% relative humidity		
Overcoating time	Ideal: 2 hours 30 minutes at 25°C at 50% relative humidity		
Percentage solids	~62% by mass, 56% by volume		
Percentage VOC	~406 g/l		
Service temperature	-30°C to 100°C		
Application temperature	10°C to 35°C		
Specific Gravity	1,010 g/cm <sup>3</sup>		
Viscosity	56 to 62 Krebs Units at 230C		
Tensile strength	26MPa at break		
Elongation	250%		
Flash point	27°C		
Explosive limits	lower: 2,1% by vol upper: 11,5% by vol		
Hazardous reactions	Exothermic reaction with amines, alcohols, acids and alkalis in uncured state. Reacts with water forming CO <sub>2</sub> gas. Closed containers may rupture owing to increase of pressure. Open pressurized containers carefully, to release pressure.		
Toxicity	Toxic in uncured state		
Thinning	Duram Solvent, Toluene, Xylene		
Cleaning the coating	hot soapy water		
Shelf life	18 months		
Storage conditions	Cool dry place below 25°C		
Drying schedule @ 250 microns wet film thickness	@10°C	@20°C (50% RH)	@30°C
Tack free time	6 hours	3 hours	2 h 15 min
To recoat	Minimum 4 hours	2 h 30 min	1 h 15 min
Note:	Maximum before re-preparation of the surface becomes necessary: 24 hours The maximum recoat time is 24 hours at all temperatures. If left longer a solvent wipe is recommended before continuing.		

*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: March 2015 (this supercedes all previous publications)*