Optima COATINGS

DATA SHEET

FLOORING

Protectakote

Optima Coatings Protectakote is a tough, ready-to-use, anti-slip polyurethane coating. The textured surface is ideal for floors, factory work-stations, walkways, stairs, ramps, vehicles and other areas where a flexible, durable and long lasting non-slip surface is important. Protectakote is available in a variety of colours as well as in a smooth version for maintenance coats and is easy to apply by brush, roller or spray.

Colours: A large range of standard colours.

PRODUCT USES

- Optima Coatings Protectakote is suitable for interior and exterior use, however for extended life in extreme outdoor conditions, Optima Coatings Protectakote UVR is recommended.
- Protectakote can be applied to: metal, concrete, wood, fibreglass, PVC, rubber, glazed tiles and previously painted surfaces.
- Protectakote can be used:
    - To create safe, anti-slip areas on light industrial and commercial floors.
    - Ramps for wheelchair access.
    - Emergency exits and fire escapes.
    - Anti-slip areas around machinery.
    - Bridges, steps and walkways.
    - An automotive coating to protect load beds, tail lifts, chassis and wheel-arches of 4x4's, trucks, commercial vehicles and trailers.
- Smooth finish is ideal as a protective coating for indoor flooring applications and can also be used to refurbish textured areas without adding more profile.

ADVANTAGES

- Premium anti-slip coating
- Single component – ready to use direct from can.
- Easy to apply – no skilled labour required.
- Tough and flexible.
- Non-abrasive – will not damage or scratch.
- Durable polyurethane with rubber crumb texture.
- Prevents rust and corrosion.
- Resists many solvents and has a good chemical resistance to organic and inorganic acids.
- Impact resistant – will not chip, flake or peel.
- Excellent capacity to repel water.
- High adhesion to most surfaces including metal, concrete, wood, fibreglass, PVC and rubber (except unprimed metal and olefin polymers, eg. PE and PP).
- Available in a smooth finish, or textured anti-slip finish.
- Available in a lower viscosity spray version.
- Drying time can be accelerated if necessary.
- Can be overcoated and easily repaired.
- Will not taint water or food once cured.
- Available in a wide variety of colours.

COVERAGE

- $3m^2$ per litre per coat. Applied in a 2 coat application.
- Three coats are recommended for high wear areas.
- Coverage will vary depending on the porosity and profile of the surface.

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 Protectakote.
- Steel and Aluminium: Remove surface rust with a light sandpaper or wire brush. Clean thoroughly with xylene and allow to dry thoroughly. Perform an adhesion test, as mild steel may not require an etch primer; all other metals require a suitable metal primer.
- 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 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 Optima Coatings Protectakote 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 Protectakote by thinning with 10% xylene if necessary.
- Wood: Abrade, clean and dry the surface before applying Protectakote directly - dilute the first coat with 10% xylene to aid penetration.
- Fibreglass: Abrade well, solvent wipe and apply Protectakote directly onto the surface.
- PVC: Abrade and clean well using xylene. Allow to dry. Apply Protectakote directly. An adhesion test is recommended prior to use.
- Rubber (nitrile or chloroprene): Abrade and clean well using xylene. Allow to dry. Apply Protectakote 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 Protectakote directly.
- Glazed tiles: Glazed tiles must be cleaned and treated with a suitable primer (an organosilane) for adhesion of Protectakote.

APPLICATION

- Take care when opening as contents may be under pressure.
- Ensure substrates have been prepared; tests for adhesion completed and areas not to be coated have been masked off.
- Stir well before use. Stir for at least 3 minutes prior to application and occasionally during application.
- Spray: Dilute Optima Coatings Protectakote with 10% xylene. Use a minimum pressure of 5 bar. Protectakote should be applied in thin coats to prevent “mudcracking” during drying. Depending on the application, two or more coats can be applied, allowing time for all solvent to evaporate between coats. Intercoat time approximately 2 – 2.5 hours (when touch dry) depending on ambient conditions.
- Brush/Roller: Apply first coat of Protectakote using a soft brush or stipple roller. Begin by painting the corners and hard to reach areas. Protectakote 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 0,6mm to 0.8mm. Do not apply Protectakote too thickly or mud-cracking and pooling will occur. Second or subsequent coats should be applied at right angles to the previous coat and must be applied within 24 hours or re-preparation of the surface must be done. Allow each coat to dry to a tack-free surface before applying a second coat.
- Roller: If applied with a stipple roller, application is quicker and the final texture rougher with greater anti-slip characteristics. Not recommended for smooth version.
- Curing time: Protectakote cures with atmospheric moisture and therefore drying time may vary with temperature and humidity. Light use is possible after 6-9 hours and full use after 24 hours. Full strength is achieved after 4 days. Do not expose Protectakote to extreme weather or allow contact with water until fully cured.
- Accelerated cure: In areas of low atmospheric moisture or when shorter curing times are required, an accelerator can be added prior to use.
- Overcoating time: 120 – 150 minutes at 25ºC at 50% relative humidity. If Protectakote is left too long it should be re-prepared prior to re-coating. Depending on degree of dirt or fall-out this may be just a solvent wipe, or mild abrasion and a solvent wipe.
- Touch-up and repair: Protectakote 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.
- Once the can is opened, use contents preferably within 3 hours. If Protectakote becomes too thick to apply, thin with xylene only. In order to extend pot-life keep the lid on whenever possible and use plastic to cover the can.

CLEANING

- Hands and equipment can easily be cleaned with xylene after the drying time but before final cure.
- Acetone can also be used to clean away uncured Protectakote but cannot be used 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.
- Do not apply to bare metal without an appropriate primer.
- Remove any overspray immediately - Protectakote is very difficult to remove once cured.
- Once opened, use Protectakote within 3 hours, or 2 hours if an accelerator is used.
- Protect from moisture and do not expose unopened cans to temperatures above 50ºC.

SAFETY PRECAUTIONS

- Protectakote is highly flammable in its wet state due to its solvent content. Use extinguishing powder, CO2 or halogens to extinguish in case of emergency.
- Ensure good ventilation to prevent the build up of flammable solvents.
- Wear protective goggles and rubber gloves. Marinekote bonds to skin and can only be removed with a pommel 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	1 litre, 5 litre		
No of components	One		
Finish	Gloss		
Colour	Range of 30 standard colours		
Tinting	Not recommended		
Shelf life	18 months unopened. Store indoors at 5 to 35ºC.		
Thinning/clean up	Xylene		
Flash point	27°C		
Tensile strength at break	16MPa		
Elongation at break	225%		
Storage	Cool, dry area below 25°C		
Drying schedule @ 425 microns wet	@ 10°C	@ 20°C	@ 30°C
Tack free time	6 hours	3 hours	2 hours 15 min
Light traffic	18 hours	9 hours	6 hours 45 min
Full traffic	72 hours	36 hours	27 hours
Full cure	4-7 days depending on conditions		
To recoat:			
Minimum:	6 hours	2 hours 30 min	2 hours 15 min
Maximum before re-preparation of the surface becomes necessary:	24 hours		

Note: Application to substrates in excess of 35°C is not advisable due to the potential for surface defects and porosity. Above 45°C the drying may be impaired due to evaporation of the catalyst.

Accelerator: An accelerator is available for use below 10°C when extended drying times are undesirable. Use at higher temperatures can cause surface defects.

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 2013 (this supercedes all previous publications)