

PROTECTAKOTE – Data Sheet

DESCRIPTION

Protectakote is a single pack polyurethane which cures into an attractive, tough, textured or smooth coating with excellent abrasion and chemical resistance, and non-slip qualities.

Versions:

- Spray, for application by a wide nozzle underbody (Schutz 4mm bore) spray gun, which screws directly onto the 1 l can. (Black & Grey only, other colours available to special order)
- Brush/Roller, for application by paint brush or 'stipple' roller, as used for stipple paints.

Colours: Black (RAL9005), Grey (RAL7012), Dark Red (RAL3013), Red (RAL3020), Blue (RAL5010) and Green (RAL6005) These RALs are approximate due to the nature of the product.

PRODUCT USES

- Load areas of pick-up trucks for protection and non-slip properties
- Floors and steps of transporters and busses
- Ramps for wheelchair access
- Emergency exits and fire escapes
- Non-slip areas around machinery
- Bridges, steps, walkways, decks and helicopter pads on ships
- Non-slip surfaces in showers, change rooms and ablution blocks

ADVANTAGES

- Tough and weather resistant
- Easy to apply, no skilled labour required
- Will not taint water or food once cured
- Bonds to most surfaces except unprimed metal
- Non-slip
- Can be overcoated
- Resists many solvents, good chemical resistance to organic and inorganic acids
- Abrasion resistant

COVERAGE

Total coverage: About 1- 1.5m² / litre applied in two coats i.e. 2-3m² / l per coat.

SURFACE PREPARATION AND PRIMING

Substrates differ significantly, and so all new applications should be tested first. All surfaces must be sound, dry and free of oils or greases. If in doubt or when applying to areas greater than 15m² we recommend that a test area is done first.

- **Cement:** Old and new cement or concrete surfaces must be acid-etched, rinsed well, dried and primed with Duraprime epoxy primer. Good quality concrete, not subject to any rising damp can be applied without a primer and the first coat diluted 10% with Xylene.
- **Steel:** To be free of millscale, rust, grease and well abraded. Prime with Metcote etch primer.
- **Galvanized steel:** Scour with alkaline detergent or galvanized pre-cleaner to a water break free surface. Prime with Metcote etch primer.
- **Aluminium:** Abrade to fresh metal and prime with aluminium etch primer within 30 minutes. For applications where pooling of water is expected a specific, waterproof primer for aluminium is required.
- **Fibreglass:** Abrade well and apply Metcote etch primer.
- **Timber:** Abrade before applying Protectakote. Damp timber requires a moisture barrier.
- **Gloss Paints and Varnish:** Abrade to remove all gloss.
- **Rubber (nitrile or chloropene):** Clean well using detergent or cleaning solvent. Allow to dry. Test adhesion first.

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PRIMING REQUIREMENTS

All primers to be selected applied and overcoated to manufacturers specifications.
Protectakote exhibits good adhesion to acrylic, epoxy and polyurethane primers.

APPLICATION INSTRUCTIONS

Ensure substrates have been prepared; tests for adhesion completed and areas not to be coated have been masked off. Stir well before use.

Spray Version: Screw spray gun onto can, and attach airline providing 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 solvents to evaporate between coats. Intercoat time approximately 2 hours (when touch dry) depending on ambient conditions.

Brush/Roller: 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 0,75mm to 1mm. Second or subsequent coats should be applied at right angles to the previous coat.

Roller: If applied with a stipple roller, application is quicker and the final texture rougher with greater non-slip characteristics. Intercoat times approximately 2 hrs depending on ambient conditions.

- **Curing time:** Protectakote cures with atmospheric moisture. Without accelerator the coating will be touch dry in about 2 to 4 hrs, allowing light traffic after 12 hrs, and achieves full strength and chemical resistance in 4 to 7 days, but normally coating can be put to use after 24 hours.
- **Accelerated cure:** In areas of low atmospheric moisture or when shorter curing times are required, an accelerator can be added. This is available from manufacturer or supplier.
- **Overcoating 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. Follow application instructions. If Protectakote is left for more than 24 hrs after coating, it should be abraded before recoating to aid intercoat adhesion.

SOLVENT/CLEANING

Protectakote can be cleaned in its uncured state using Xylene.

PRECAUTIONS

- Do not clean surfaces with Lacquer thinners.
- Do not apply to bare metal without an appropriate primer.
- Protectakote is highly flammable in its wet state, solvents released during spraying, observe all fire precautions.
- Remove any overspray immediately; Protectakote is very difficult to remove once cured.
- Once opened use Protectakote within 2 hours or 1 hour if accelerator is used.
- Ensure good ventilation to prevent build up of flammable solvents.
- Protect from moisture and do not expose to temperature above 50 ° C.
- Wear goggles, rubber gloves.

ACCIDENT MEASURES

- **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, CO₂ or halones.
- Eye contact: rinse with water.
- Skin contact : wash with soap and water.
- Should Protectakote be swallowed seek medical advice.

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TECHNICAL DATA

Pack size:	1l, 4l & DIY Kit
No of components	Single pack
Touch drying time	2 hours at 25°C, 50% relative humidity
Light foot traffic	12 hours
Full cure	4-7 days full cure
Overcoating time	Ideal: 2-4 hrs at 25°C at 50% relative humidity Max: 24 hrs at 25°C at 50% relative humidity
Volume solids	70%
Film tensile strength at break	16MPa (ASTM D638)
Film elongation at break	225% (ASTM D638)
Service temperature	-30°C to 115°C
Application temperature	5°C to 35°C
Flexibility	Excellent
Weathering	Excellent, not colour fast, may fade
Density	1,03g/cm ³ (brush version)
Viscosity	80 to 110ku (brush version)
Soluble in	Xylene
Flash point	>23°C
Explosive limits	lower: 2,1 % by vol upper: 11, 5% by vol
Thermal decomposition	No decomposition below initial boiling point
Hazardous reactions	Exothermic reaction with amines, alcohols, acids and alkalis in uncured state. Reacts with water forming CO ₂ . Closed containers may rupture owing to increase of pressure. Open pressurized containers carefully, to release pressure.
Toxicity	Toxic in uncured state
Cleaner	Duram Solvent, Toluene, Xylene
Shelf life	12 months
Storage conditions	Cool dry place below 25°C

Technical details above are provided in good faith. We are an ISO 9001 2000 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 user conduct his own suitability tests before use.

Manufactured by: Duram Industries

Distributed by : New Venture Products Ltd

Technical Helpline: 0845 430 4030

Updated: Jan 2009