

DESCRIPTION

Duradek is a single-component polyurethane coating incorporating non-slip particles that provide an attractive slip-resistant surface for wet or dry walkways in marine environments. Its moisture-cure aliphatic polyurethane composition provides ease of application with an extremely abrasion and weather resistant film. Duradek has an attractive, low gloss finish which is easy to clean.

Duradek comes in attractive standard marine colours that will not fade or yellow from UV radiation, although safety colours and other colours are available on request.

PRODUCT USES

Duradek is ideal for:

- Boat decks
- Steps
- Walkways
- Jetties
- Ramps

ADVANTAGES

- Tough and weather resistant
- Colour-fast
- Easy to apply, simply apply by brush or roller
- Bonds to fibreglass, wood and most other surfaces without a primer
- Can be overcoated or repaired
- Resists diesel, petroleum and many solvents, good resistance to organic and inorganic acids
- Abrasion resistant
- Good inherent flexibility to allow for substrate movement
- Fast drying and cure- trafficable after only 4 hours
- Will not taint water or food once cured

COVERAGE

Total coverage: 3-4 square meters per litre applied in two coats i.e. 6-8m² / litre per coat, depending on porosity and texture of surface.

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. Loose and flaking paint or varnish should be removed. As Duradek is a moisture-curing product, all substrates must be dry before application of Duradek.

- **Fibreglass:** No primer required. **Lightly scuff with a scouring pad to remove gloss if necessary.**
- **Timber:** Ensure that any waxy timber treatment products are removed and that the wood is dry before application.
- **Old gloss paints and varnish:** Abrade to remove all gloss. Solvent wipe.
- **Steel:** To be free of mill scale, rust, grease and well abraded. Anti-corrosion primer recommended.
- **Galvanised steel:** Scour with alkaline detergent or galvanised pre-cleaner to a water break free surface. Anti-corrosion primer is recommended.
- **Aluminium:** Abrade to fresh metal and prime with a 2K aluminium etch primer within 30 minutes.
- **Cement:** Old and new cement or concrete surfaces must be cleaned, rinsed well, dried and primed with a water-based epoxy primer e.g. Duraprime.

Duradek 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. Duradek is best applied with a brush, however a short-hair roller can be used to speed up the process. Lay the paint out with the roller and use the brush to touch it up.

The product should be applied in two or more thin coats at right angles to one another, ensuring maximum coverage. Do not allow the product to form pools, as the non-slip particles will not stand proud.

- **Curing time:** Duradek cures with atmospheric moisture. Depending on temperature and humidity the coating will be touch dry in about 60 – 90 minutes per coat. Light traffic will not damage the coating after 6 hours and full serviceability is achieved after 12 hours. Final strength and chemical resistance is achieved after 3 to 4 days.
- **Overcoating and repair:** Duradek can easily be repaired or overcoated. The old surface should be well cleaned and then solvent wiped just prior to application.

SOLVENT/CLEANING

If thinning is necessary, use up to 10% of xylene. Do not use any solvent containing water or alcohols as this will prevent drying.

Spills and brushes can be easily cleaned with solvent after the drying time but before final cure.

Note: Do not use equipment previously cleaned in solvents other than xylene with this product, unless completely dry such that no water or alcohols come into contact with this product.

PRECAUTIONS

- Do not clean porous surfaces with solvents other than xylene as water and alcohols may be retained and prevent drying of Duradek.
- Do not apply to bare aluminium without an appropriate 2K primer.
- Duradek is highly flammable in its wet state due to its solvent content. Observe all fire precautions.
- Remove any overspray immediately; Duradek is very difficult to remove once cured.
- Once opened use Duradek within 4 hours or a skin may form.
- If a skin forms, remove skin carefully to avoid lumps in the product.
- 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. Duradek bonds to the skin and can only be removed with a pommel stone.
- If applying Duradek daily, a cartridge-type half face mask with replaceable cartridges for organic fumes should be worn.

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 halogens.
- Eye contact: rinse with water. If pain persists see a physician.
- Skin contact: wash with soap and water. Discolouration may persist for a few days.
- Should Duradek be swallowed seek medical advice.



TECHNICAL DATA

Pack size:	11 & 51
No of components	Single pack
Touch drying time	60 - 90 minutes at 25°C and 70% relative humidity
Light foot traffic	6 hours after final coat
Full serviceability after	12 hours
Full cure	3 - 4 days to reach final strength
Overcoating time	Ideal: 60 – 90 minutes at 25°C and 70% relative humidity
Percentage solids	~70% by mass
Percentage VOC	~285g/l
Tensile strength at break	29MPa (ASTM D638)
Elongation at break	175% (ASTM D638)
Service temperature	-40°C to 120°C
Application temperature	10°C to 35°C
Hardness	95 Shore A
Weathering	no change after 1000 hours QUV
Specific Gravity	0,93 g/cm ³
Viscosity	68 to 72 ku (QC RELEASE SPEC) 75 to 85 ku (AFTER 30 DAYS IN TIN)
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 ₂ gas. Open pressurized containers carefully, to release pressure.
Toxicity	Toxic in uncured state
Thinning	Duram Solvent, Toluene, Xylene
Cleaning the coating	hot soapy water, methylated spirits
Shelf life	18 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 : ZEST POLYURETHANES (PTY) LTD

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