



Marinekote

Smartkote Marinekote is a single-component polyurethane coating incorporating anti-slip silicone particles that provides an attractive slip-resistant surface for wet or dry walkways in marine environments. Its moisture-cure aliphatic polyurethane composition provides easy application with an extremely abrasion and weather resistant film. **Marinekote** has an attractive, low gloss finish which is easy to clean. **Marinekote** comes in attractive standard marine colours that will not fade or yellow from UV radiation.

PRODUCT USES

- **Marinekote** can be applied to: Aluminium, concrete, fibreglass, previously painted surfaces, PVC, rubber, steel, galvanized steel and wood.
- **Marinekote** is an anti-slip paint, ideal for:
 - Boat decks.
 - Stowage areas.
 - Steps.
 - Walkways.
 - Ramps.
 - Any other marine application where an anti-slip coating is required.

COVERAGE

- 5 - 6m² per litre per coat. Applied in a 2 coat application. Giving an overall coverage of 2½ - 3 m² per litre.
- Three coats are recommended for high wear areas.
- Coverage will vary depending on the porosity and profile of the surface.

FINISH

- Semi-gloss

SURFACE PREPARATION

Ensure all substrates are thoroughly dry, clean, sound and free from any contaminants such as dirt, rust, salt, algae and grease. **Marinekote** exhibits good adhesion to most primers. All non-porous substrates with the exception of painted surfaces require a primer. Zest Polyurethanes supplies suitable primers for all substrates - consult us for our range of primers. Substrates differ significantly, and so all new applications should be tested for adhesion first.

- **Steel:** Abrade surface lightly and remove any surface rust or mill scale by sanding, wire brushing, with a chipping hammer or sandblasting. Prime with **Protectakote 2K Metal Primer** or **Protectakote Universal Epoxy Primer**, as per instructions, within 30 minutes.
- **Galvanized Iron:** Clean away grease and dirt with a suitable galvanized iron cleaner until a water break-free surface is attained. Rinse well with water and allow to dry. Prime with **Protectakote Universal Epoxy Primer** the same day as the surface was prepared to avoid re-contamination and flash rust.
- **Aluminium:** Abrade to fresh metal, clean well using detergent. Prime with **Protectakote 2K Metal Primer** as per instructions within 30 minutes.
- **Concrete:** Allow new concrete at least 28 days to cure. Non-porous cement must be acid-etched, rinsed well and dried. Prime with **Duram Duraprime** epoxy primer as per instructions if weak, damp or oil contaminated.

COLOURS

- A range of standard colours available

ADVANTAGES

- Easy to apply direct from can.
- Attractive anti-slip finish.
- Good inherent flexibility to allow for substrate movement.
- Resists diesel, petroleum and many solvents, good resistance to organic and inorganic acids.
- Tough and weather resistant.
- Colour-fast.
- Bonds to fibreglass, wood and some other surfaces without a primer.
- Can be overcoated or repaired.
- Abrasion resistant.
- Fast drying and cure - trafficable after only 4 hours.
- Will not taint water or food once cured.
- Easy to clean.

- **Wood:** Abrade, clean and allow to completely dry before applying **Marinekote** directly. Dilute the first coat with 10% xylene to aid penetration.
- **Fibre-glass:** Abrade well, solvent wipe with xylene and apply **Marinekote** directly onto the surface.
- **PVC:** Abrade and clean well using xylene. Allow to dry before applying **Marinekote** directly. An adhesion test is recommended prior to use.
- **Rubber (nitrile or chloroprene):** Clean well using detergent or cleaning solvent such as xylene. Allow to dry. An adhesion test is recommended prior to use.
- **Glazed tiles:** Glazed tiles must be cleaned and treated with an organosilane primer eg. **Protectakote Clear Primer Treatment** for adhesion of **Marinekote**.
- **Gloss Paints and Varnish:** Abrade with a scouring pad or medium grit sandpaper to remove all gloss. Wipe with a solvent, allow to dry and apply **Marinekote** directly.
- **Motor Vehicles and Painted Metal:** Remove heavy dirt and rust. Previously painted surfaces need to be lightly abraded using a scouring pad or medium grit sandpaper to remove all gloss. Wipe with a solvent, allow to dry and apply **Marinekote** directly.

APPLICATION

- Take care when opening as contents may be under pressure.
 - Wear safety goggles and protective gloves.
 - After substrates have been prepared, ensure they are completely dry, tests for adhesion have been completed and areas not to be coated have been masked off.
 - Stir well before use using a flat paddle.
 - Always apply a test patch of **Marinekote** to ensure the substrate has been properly prepared and primed. Check adhesion of the coating by cutting a small X in the coating using a utility knife. Firmly apply a piece of packaging tape over the centre of the X cut, then pull off with a fast snap. The adhesion is suitable if no significant coating is removed beyond the X cut. If the coating fails this test, then additional surface preparation is required – repeat the surface preparation steps above.
 - **Brush-on:** **Marinekote** 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 0.35 - 0.47mm. Second or subsequent coats should be applied at right angles to the previous coat. Intercoat time is approximately 2 hours or when touch dry, depending on ambient conditions.
 - **Roller:** If applied with a stipple roller, application is quicker and the final texture rougher with greater anti-slip characteristics. Follow same instructions as per Brush-on. Intercoat time is approximately 2 hours or when touch dry, depending on ambient conditions. **Marinekote** can be applied with a short mohair roller or fine foam roller as well.
 - **Spray-On:** Dilute **Marinekote** with 10% xylene. Fill spray gun pot, and attach airline providing a minimum pressure of 5 bar. **Marinekote** should be applied in thin coats to prevent “mudcracking” during drying. Depending on the application, two or more coats can be applied. Ensure each coat is dry before applying the next coat. Intercoat time is approximately 2 hours or when touch dry, depending on ambient conditions.
 - **Curing time:** **Marinekote** cures with atmospheric moisture. The coating will be touch dry in about 2 to 4 hours and allowing light traffic after 9 hours. Full strength and chemical resistance is achieved in 4 to 7 days, but normally the coating can be put to use after 24 hours.
 - **Accelerated cure:** In areas of low atmospheric moisture, temperature or when shorter curing times are required, an accelerator can be added. This is available from Zest Polyurethanes.
- Overcoating and repair:** **Marinekote** can easily be repaired or overcoated. The old surface should be well cleaned and then abraded by wire brush or sandpaper, and damaged surfaces must be cut out to provide an area without loose edges. Follow application instructions. If **Marinekote** is left for more than 24 hours after coating, it should be abraded before recoating to aid intercoat adhesion. If correctly applied, **Marinekote** provides a seamless repair.

CLEANING

- Uncured **Marinekote:** Can be cleaned in its uncured state using a solvent such as xylene.
- Cured **Marinekote:** Can be removed with MEK (Methyl Ethyl Ketone), paint stripper or by mechanical means.
- Remove any spills immediately as **Marinekote** is very difficult to remove once cured.
- Use hot soapy water to clean the cured coating.

IMPORTANT

- Please read all instructions carefully before starting the project.

- Proper surface preparation is critical for successful application of **Marinekote**.
- Do not mix with water, thinners or any solvent containing water or alcohol. Alcohol will prevent **Marinekote** from curing, while water will cause it to foam and cure in the can.
- Protect from moisture and do not expose to temperatures above 50 °C.

SAFETY PRECAUTIONS

- **Marinekote is highly flammable in its wet state due to its solvent content. Use extinguishing powder, CO2 or halogens to extinguish in case of emergency.**
- **Remove any overspray immediately; Marinekote is very difficult to remove once cured.**
- **Ensure good ventilation to prevent build-up of flammable solvents.**
- **Wear goggles and rubber gloves. Marinekote bonds to the skin and can only be removed with a pumice 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, 4 Litre
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	≥ 75% by mass
Percentage volume solids	≥ 70.5 %
Percentage VOC	≤250 g/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	0,98 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	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: 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: August 2017 (this supercedes all previous publications)