

TECHNICAL DATASHEET



Safekote WB

Safekote WB is a water-based anti-slip polyurethane coating with a fine texture, ideal for creating safe, anti-slip walkways, steps and ramps. It is easy to clean and provides outdoor weather resistance even in marine environments. As a single component water-based product it is easy to apply and as polyurethane it demonstrates excellent abrasion resistance and flexibility even at extremely low temperatures.

PRODUCT USES

- Safekote WB is suitable for interior and exterior use.
- Safekote WB can be applied to metal, cement, wood, fibre-glass, PVC and previously painted surfaces.
- Safekote WB's textured anti-slip finish can be used:
 - Bridges, steps and walkways
 - Bathrooms
 - Boat decks
 - Ramps for wheelchair access
 - Emergency exits and fire escapes.
 - Anti-slip areas around machinery.
 - On slippery floors exposed to water such as showers, change rooms and ablution blocks.
 - Any other areas where an anti-slip coating is required (with suitable primer).

COVERAGE

- 3m² per litre per coat. Applied in a 2 coat application.
 Provides an overall coverage of 1.5m² per litre.
- Three coats are recommended for high wear areas.
- Coverage will vary depending on the porosity and profile of the surface.

FINISH

A fine texture anti-slip finish

COLOURS

 Black, Blue, Clear, Cream, Green, Grey, Light Grey, Mid Grey, Orange, Red, White and Yellow

ADVANTAGES

- Water-based low odour, non-flammable and weather resistant.
- Easy to clean up simply use water before it cures.
- Single component ready to use direct from can.
- Easy to apply no skilled labour required.
- Fast drving.
- Polyurethane performance ultimate toughness.
- Synthetic silica particles for texture.
- Flexible won't chip, flake or peel.
- Excellent resistance to abrasion, chemicals and solvents.
- Prevents rust and corrosion with suitable primer.
- Excellent capacity to repel water.
- High adhesion to most surfaces including metal, cement, wood, fibre-glass and PVC.
- Can be overcoated.
- Repairable bonds to itself.
- Will not taint water or food once cured.

SURFACE PREPARATION

Ensure all substrates are thoroughly dry, clean, sound and free from any contaminants such as dirt, rust, salt, algae and grease. **Safekote WB** 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 **EP90 Universal Epoxy Metal 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 **EP90 Universal Epoxy Primer** the same day as the surface was prepared to avoid re-contamination and flash rust.
- Aluminium: Abrade surface lightly, clean well using detergent. Prime with EP90 Universal Epoxy Primer as per instructions within 30 minutes.

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• **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.

- **Wood:** Abrade, clean and allow to completely dry before applying **Safekote WB** directly. Dilute the first coat with up to 10% fresh tap water to aid penetration. Dense oily woods may require a primer.
- Fibre-glass: Abrade well, clean with detergent and apply Safekote WB directly onto the surface.
- PVC: Abrade and clean well using detergent. Allow to dry before applying Safekote WB directly. An adhesion test is recommended prior to use.
- Gloss Paints and Varnish: Abrade with a scouring pad or fine grit sandpaper to remove all gloss. Wipe clean with water and detergent, allow to dry and apply Safekote WB directly.
- Painted Metal: Remove heavy dirt and rust. Previously painted surfaces need to be lightly abraded using a medium grit sandpaper
 to remove all gloss. Wipe clean using detergent, allow to dry and apply Safekote WB directly.

APPLICATION

- 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 Safekote WB 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: Safekote WB 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 0.23 0.25mm. 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. **Safekote WB** can be applied with a short mohair roller or fine foam roller as well.
- **Spray-On:** Dilute **Safekote WB** with up to 10% of clean tap water. Fill spray gun pot, and attach airline providing a minimum pressure of 5 bar. **Safekote WB** should be applied in thin coats to prevent "mudcracking" during drying. Depending on the application, two or more coats should 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: Safekote WB** 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.
- Overcoating and repair: Safekote WB 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 Safekote WB is left for more than 24 hours after coating, it should be abraded before recoating to aid intercoat adhesion. If correctly applied, Safekote WB provides a seamless repair.

CLEANING

- Uncured Safekote WB: Can be cleaned in its uncured state using water.
- Cured Safekote WB: Can be removed with MEK (Methyl Ethyl Ketone), paint stripper or by mechanical means.
- Remove any spills immediately as Safekote WB 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 Safekote WB.

SAFETY PRECAUTIONS

- Skin contact: Wash thoroughly with soap and water.
- Eye contact: Flush immediately with water for 10 15 minutes and contact a physician.
- Not for internal consumption. Should Safekote WB be swallowed seek medical advice.
- · Keep out of reach of children.

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TECHNICAL DATA

Pack size 1 litre, 4 litre
Finish Textured Semi-gloss

Colour Black, Blue, Clear, Cream, Green, Grey, Light Grey, Mid Grey, Orange, Red,

White and Yellow

No of components Single pack

Touch drying time 2 hours at 25°C, 70% relative humidity

Light foot traffic9 hoursFull traffic24 hoursFull cure4-7 days

Overcoating time Ideal: 2 hrs at 25°C and 70% relative humidity

Max: 24 hrs at 25°C and 70% relative humidity

Volume solids of Clear: 38% Volume solids of Colours: 40%

Dry film thickness (DFT): 125 microns per coat applied at 3m² per litre (colours)

90 microns per coat applied at 3m² per litre (clear)

VOC content
4.7% by mass
Film tensile strength at break
Film elongation at break
Service temperature
Application temperature
Flexibility
4.7% by mass
35MPa (ASTM D638)
270% (ASTM D638)
10°C to 85°C
10°C to 30°C
Excellent

Weathering Excellent weather resistance, colour fast

Density 1,01g/cm3 (brush version)

78 to 82ku Viscosity Water Soluble in Flash point N/A Explosive limits N/A Thermal decomposition >220°C Hazardous reactions none **Toxicity** non toxic Thinning/ Clean up Uncured: Water

Thinning/ Clean up Uncured: Water Cured: MEK
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 2020 (this supersedes all previous publications)