

EP90 Universal Epoxy Primer

Smartkote EP90 Universal Epoxy Primer is an easy-to-use, low viscosity primer suitable for all polyurethane topcoats. It cures to provide exceptional adhesion to a variety of substrates, with the flexibility required for urethane. It provides a cost-effective coverage rate and a fast drying time even at low temperatures. **EP90 Universal Epoxy Primer** is ideal for concrete, plaster, metals, wood, stone and existing coatings. **EP90 Universal Epoxy Primer** has minimal solvent content and low odour suitable for interior spaces. **EP90 Universal Epoxy Primer** contains zinc to inhibit metal corrosion.

PRODUCT USES

EP90 Universal Epoxy Primer is suitable for interior and exterior use.

EP90 Universal Epoxy Primer can be applied to: metal, concrete, wood, fibre-glass, PVC and previously painted surfaces.

EP90 Universal Epoxy Primer is used with urethane coatings on walkways, open areas and flat concrete roofs.

EP90 Universal Epoxy Primer provides the flexibility required for flexible topcoats and substrates.

EP90 Universal Epoxy Primer shows exceptional adhesion to metals as well as green or damp concrete. Its zinc content inhibits corrosion.

COVERAGE

- 6-8m² per litre per coat. Applied in a single application. .
- Coverage will vary depending on the porosity and profile of the surface.

SURFACE PREPARATION

Ensure all substrates are thoroughly clean, sound, dry and free from any contaminants such as dirt, rust, salt, algae, fungi, oil, grease and loose, flaking paint.

EP90 Universal Epoxy Primer exhibits good adhesion to all porous substrates and most non-porous substrates with the exception of certain types of aluminium and stainless steel.

- **Steel:** Abrade surface lightly and remove any surface rust or mill scale by sanding, wire brushing, with a chipping hammer or sandblasting. A rust convertor may be necessary for rust that can't all be removed.
- **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.
- **Aluminium:** Abrade to fresh metal, clean well using detergent. Apply within 2 hours before oxides can reform. A test area is recommended with certain grades of aluminium, especially marine grades which may be difficult to bond to.

FINISH

- Gloss

COLOURS

- Silver Grey (RAL7001)

ADVANTAGES

- Pre-weighed components. Simply add Part B to Part A and mix.
- Easy to apply – low viscosity once mixed.
- Fast drying – overcoat in 3-4 hours.
- Exceptional bond strength to urethanes.
- Flexible – won't crack
- Excellent resistance to chemicals and solvents.
- Prevents rust and corrosion.
- Excellent capacity to repel water.
- High adhesion especially to metal and concrete.
- Adhesion to green concrete.
- Adhesion to damp concrete.
- Will not taint water or food once cured
- Lead & heavy metal free.

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- **Concrete:** Allow new concrete at least 7 days to cure. Non-porous cement must be acid-etched, rinsed well and dried
- **Wood:** Abrade, clean and allow to completely dry before applying.
- **Fibre-glass:** Abrade well, solvent wipe with xylene and apply.
- **PVC:** Abrade and clean well using xylene. Allow to dry before applying.
- **Glazed tiles:** Glazed tiles must be cleaned and treated with an organosilane primer eg. **Protectakote Clear Primer Treatment**. This primer is not suitable for glazed tiles.
- **Gloss Paints and Varnish:** Abrade with a scouring pad or medium grit sandpaper to remove all gloss. Solvent wipe with xylene, allow to dry and apply directly.
- **Ferrous metals:** Remove heavy dirt and rust. Use a rust convertor for rust that cannot be removed. Sand lightly, clean thoroughly and apply.
- **Stone:** clean thoroughly with soapy water. Brush with a wire brush. Solvent wipe and apply once dry.

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 part A until homogeneous before use using a flat paddle. Add part B to part A and stir again for at least 2 minutes.
 - Apply at a rate of 6-8 m² per litre, or a wet film thickness (WFT) of 125 – 166 microns.
 - Curing time: (i) at 20°C: the coating will be suitable for overcoating in 3 hours 30 minutes and touch dry in about 4 hours.
(ii) at 6°C: the coating will be suitable for overcoating in 8 hours and touch dry in about 12 hours.

CLEANING

- Uncured **EP90 Universal Epoxy Primer**: Can be cleaned in its uncured state using a solvent such as xylene.
- Cured **EP90 Universal Epoxy Primer**: Can be removed with MEK (Methyl Ethyl Ketone), paint stripper or by mechanical means.
- Remove any spills immediately as **EP90 Universal Epoxy Primer** is very difficult to remove once cured.
- Use hot soapy water or xylene to clean the cured coating.

IMPORTANT

- Please read all instructions carefully before starting the project.
- Proper surface preparation is critical for successful application of **EP90 Universal Epoxy Primer**.
- Take care when lifting and carrying. In transit, keep tightly closed in a secure upright position.
- Do not mix with water.
- Do not apply outside if rain is expected. Apply when ambient and surface temperatures are 5°C to 35°C.
- Keep cool and protect against freezing.
- Donate unwanted paint. Dispose contents responsibly - do not empty into drains or watercourses. Recycle empty container

SAFETY PRECAUTIONS

- Keep out of reach of children.
- Always wear protective gloves / protective clothing / eye protection / face protection.
- Avoid contact with skin and eyes.
- Do not eat, drink or smoke when using this product.
- Not for internal consumption. If swallowed: Immediately call a poison center / doctor. Do not induce vomiting.
- If on skin: Causes skin irritation. Wash with plenty of soap and water.
- Use in a well-ventilated area. In case of inadequate ventilation, wear respiratory protection. If experiencing respiratory symptoms: Move person to fresh air. Call a doctor.
- If in eyes: Rinse with water and remove contact lenses.
- Flammable liquid and vapour. Keep away from heat/sparks/open flames/hot surfaces. In case of fire: use extinguishing powder, CO₂ or halones to extinguish.

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TECHNICAL DATA

Pack sizes	1L and 4L	
Finish	Gloss	
Colour	Grey	
No of components	Two	
Drying schedule @ 150 microns WFT	@ 6°C	@ 20°C
Overcoatable in:	8 hours	3 hours 30 minutes
Tack free time	12 hours	4 hours
Re-prepare after:	48 hours	
Volume Solids:	≥ 94%	
Weight Solids:	≥ 95%	
VOC Content	≤85g/L	
Film tensile strength at break	35MPa	
Film elongation at break	75%	
Service Temperature	-30°C to 115°C	
Application temperature	5°C to 30°C	
Flexibility	Good	
SG:	0,98977g/cm3	
Viscosity	1050cPs	
Soluble in	Xylene	
Flash point	27°C	
pH:	10.5	
Thermal decomposition	Decomposes above 200°C	
Hazardous reactions	Exothermic reaction with alcohols and acids in uncured state.	
Toxicity	Toxic in uncured state	
Thinning/clean up	Xylene	
Shelf Life	2 years unopened. Store indoors at 5 to 35°C.	
Storage Conditions	Cool, dry area 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: March 2019 (this supercedes all previous publications)