

Technical Data Sheet

EPX-100

Premium Epoxy Coating

Two-component, 100% solids, solvent free epoxy

DESCRIPTION

EPX-100 is a premium 2-component epoxy that is yellowing resistant. EPX-100 is 100% solids (no volatile solvents) and contains ZERO fillers or extenders so, it is a pure epoxy resin designed for use on concrete or otherwise rigid substrates.

EPX-100 has very high adhesion to most surfaces coupled with high gloss and film build with good wear resistance which makes for aesthetically pleasing functional heavy-duty coated surfaces.

USES

- Decorative flake system base coat (when pigmented) and build coat.
- Art décor floor surface for residential and commercial
- Factory floors
- Retail stores
- Automotive showrooms
- Binder for non-slip particulate surfaces
- Laboratories

ADVANTAGES

- High film build from 100% solids, wet film thickness equals dry film thickness
- High transparency and film clarity
- Suitable for interior and exterior use (pigmented or filled for exterior)
- Adheres well to a wide variety of surfaces
- Good chemical resistance (see following table)
- Water resistant
- Good durability and wear resistance
- Simple to mix 2:1 ration of resin to hardener
- Can be coloured with C3 colour packs (EPX-CPA)
- Nominal cure approximately 24 hours at 20°C and 65% RH for 200 micron, 5m² per litre film thickness on glass.
 - For cold temperatures, cure time 48 hours at 10°C. Full hardness development over 7 days.
- Can be overcoated with clear or coloured PSP-100

COVERAGE

One coat will cover approximately 1-6m² per litre, depending on application tool.

SURFACE INSPECTION AND PREPARATION

Ensure surface to be coated is free from dust, dirt, oils and greases, concrete curing agents, rust and any other contaminant that might adversely influence adhesion to the substrate. Ideally, surface should be diamond ground to a suitable profile.

C3 Solvent B may be added to help with primer coat penetration when required on extremely dense substrates.

Out gassing from the contained air within the concrete is more likely to occur during the warm-up period of the slab in the earlier part of the day. During out gassing more back rolling may be required to burst the unavoidable air bubbles from out gassing.

Application of epoxies during the slab cooling phase in the later afternoon when air is being taken into the slab rather than expelled can give a marked reduction in air bubbles from slab contained air.

Ensure concrete is at least 28 days old prior to coating.

APPLICATION

If material is to be coloured, add the **C3 colour pack (EPX-CPA)** to the resin component A and mechanically mix to uniform colour.

Add the **EPX-100 Hardener (Part B)** to the **EPX-100 Resin (Part A)** in the required ratio of 2:1. Machine stir mix to ensure complete mixing, taking care to ensure mixing in container corners and wall areas.

Pour mixed 2 pack onto the floor. Spread or distribute with appropriate application tool.

Allow to dry and cure in ventilated environment.

LIMITATIONS

- Do not apply in conditions above 30°C
- Do not apply on frozen substrate or when temperature is near freezing
- Do not apply if rain might occur during the next 30 minutes
- Always read SDS before use

TYPICAL PROPERTIES

| | |
|-----------------------------|--|
| Appearance | Transparent |
| Main Components | Epoxy resin and hardener 2-pack system |
| Solids Content, % by Weight | 100% |
| Specific Gravity | 1.04 |
| Spread Rate | 1 – 6m ² per litre |
| Flashpoint | Does not burn |
| Storage Period | 2 years at 5 - 35°C |
| Packaging | 5 and 10 litre plastic containers |

CHEMICAL RESISTANCE

| Immersion Weeks | | 0.5 | 1 | 2 | 4 | 8 | 12 |
|-------------------|-----|-----|---|---|---|---|----|
| Water, deionised | | + | + | + | + | + | + |
| Hydrochloric Acid | 20% | + | + | + | + | + | + |
| | 36% | + | + | + | + | + | + |
| Sulphuric Acid | 50% | + | + | + | + | + | + |
| Ammonia | 25% | + | + | + | + | + | + |
| Xylene | | + | + | + | + | + | + |
| Ethanol | 95% | + | - | - | - | - | - |
| | 50% | + | + | + | + | + | + |
| Acetic Acid | 10% | + | - | - | - | - | - |
| | 5% | + | + | + | + | + | + |

** Film thickness, 300 micron. Cured for 10 days at 20°C. Substrate sand blasted steel panel. Immersion temperature 20°C

PERSOZ HARDNESS DEVELOPMENT

200 micron film on glass

| Curing at | 1 Day | 1 Week | 1 Month |
|-----------|----------|--------|---------|
| 5°C | Too soft | 145 | 195 |
| 20°C | 165 | 270 | 290 |

FLEXIBILITY

200 micron film on degreased steel

| Aged for 2 months at | Bend angle for fracture in °C |
|----------------------|-------------------------------|
| 20°C | 100 - 180 |
| 60°C | 150 - 180 |



HEALTH AND SAFETY

For detailed information, refer to the current Safety Data Sheet.
For emergencies, please telephone 24-hour 1300 792 207.

First Aid Instructions

If swallowed: Discomfort in stomach and intestinal tract may occur. Immediately give milk or water. DO NOT induce vomiting. First aid is generally not required. Call a doctor if necessary.

If in eyes: rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing. May cause irritation and redness. If symptoms persist, consult a doctor.

If on skin: wash with plenty of soap and water. If irritation persists, seek medical advice.

Poisons Information Centre 131 126.

MANUFACTURER'S COMMENT

Use with any other manufacturer's product could result in detrimental effects on the product's performance for which Concrete Chemical Company holds no responsibility, and Concrete Chemical Company cannot be held responsible for failure to follow application instructions. Concrete Chemical Company is continually updating materials and methods. Ensure you have the latest information.

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