



ECO EPOXY SHIELD

Premium Aliphatic Yellowing Resistance 100% Solids Solvent Free Epoxy

ecosshield
PERFORMANCE COATINGS

DESCRIPTION

Eco Epoxy Shield is a premium 2-component epoxy that is yellowing resistant. **Eco Epoxy Shield** 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.

Eco Epoxy Shield 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 **Eco Colour Shield**
- 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 **Carbon Coat** or **Eco Sparta Shield**

COVERAGE

One coat will cover approximately 1-5m² per litre, depending on application tool.

SURFACE INSPECTION AND PREPARTATION

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 rough ground.

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 **Eco Colour Shield** to the resin component A and mechanically mix to uniform colour.

Add the **Eco Epoxy Shield Hardener (Part B)** to the **Eco Epoxy Shield 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

HEALTH AND SAFETY

For detailed information, refer to the current Safety Data Sheet available at www.ecoshield.com.au

For emergencies, please contact 24-hour mobile 0413 075 994.

First Aid Instructions

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 persist, seek medical advice.

MANUFACTURER'S COMMENT

Use with any other manufacturer's product could result in detrimental effects on the product's performance for which Ecoshield Performance Coatings holds no responsibility, and Ecoshield Performance Coatings cannot be held responsible for failure to follow application instructions.

Ecoshield Performance Coatings is continually updating materials and methods. Ensure you have the latest information.

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 – 5m ² per litre
Flashpoint	Does not burn
Storage Period	2 years at 5-35°C
Packaging	5 and 10 litre plastic containers

CHEMICAL RESISTANCE

+ = Resistant
- = Poor

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