



ECO SPARTA SHIELD



100% Polyaspartic 2 Pack Fast Cure Chemical and Abrasion Resistant Floor Coating

DESCRIPTION

Eco Sparta Shield offers fast cure, high gloss, UV yellowing resistance, chemical resistance and practically odour free, offering wide usage in many kinds of applications.

Ecoshields Polyaspartics are the next generation in 2 component, fast drying, Aliphatic Polyurea.

USES

Eco Sparta Shield is suitable for interior and exterior applications:

- Pharmaceutical
- Healthcare facilities
- Schools
- Food prep / kitchens
- Garage floors
- Malls
- Manufacturing plants
- Restrooms
- Aisle ways
- Laboratories
- Kennels
- Retail stores
- Chemical plants
- Commercial areas
- Driveways
- Decorative flake flooring
- UV and wear resistant topcoat for Polyurethanes and epoxy coatings

ADVANTAGES

- Fast cure enables early 24 hour use of premises
- Superior impact and wear resistance
- Excellent chemical and stain resistance
- Excellent wetting and penetration to achieve mechanical adhesion
- Suitable for interior and exterior application
- Excellent salt spray and humidity resistance
- UV resistance against yellowing
- Low temperature cure
- Reduces floor care and maintenance costs
- Flexible
- VOC compliant

COVERAGE

Coverage should be approximately 8m² per litre for a film build of 125 microns per coat.

SURFACE INSPECTION AND PREPARATION

All surfaces to be coated with **Eco Sparta Shield** must be clean, dry and free from contaminants such as dust, laitance, grease, oil, waxes and curing compounds.

Concrete should be dry to ASTM F2170 Calcium Chloride test maximum relative humidity of 75% or 5.5% as determined by an impedance moisture metre such as Tramex Concrete Encounter. Note: moisture testing does not guarantee against later moisture issues such as osmotic blistering resulting from deep down moisture within the slab diffusing to the surface.

Concrete should be prepared to an open textured surface by means of shot blasting or diamond grinding. Surface defects should be ground out, filled per Ecoshield advice then ground flat.

During the application and cure of **Eco Sparta Shield**, the substrate, material and room conditions should be maintained between 8°C and 32°C. Relative humidity is best between 25% to 70%.

Note: that as the relative humidity and temperature rise, pot life and working time on the floor decrease. For every 10°C rise in temperature the pot life and working time will be about half of that at 25 °C.

Do not apply coatings unless at least 5°C above Dew Point as haziness and loss of gloss can occur.

COMPONENT MIXING

Do not store component parts in a warm environment as the warmer the materials start point the shorter the pot life and working time.

Add 2 parts by volume of **Eco Sparta Shield Part A** to a clean mixing bucket. Stir in recommended colourant (if being used), using a slow speed power agitator mixer (paint stick mixing is not adequate).

Add 1 part by volume of **Eco Sparta Shield Part B** and slow speed mix for 15 seconds. Scrape sides and base with flat bottom and edge scraper.

Mix for a further 30 seconds. Immediately pour onto floor surface so as to maximise on-floor-working-time.

Approximate working time is 15 minutes.

APPLICATION

Eco Sparta Shield Polyaspartic is self-priming. However, a fast dry, reduced cost, lower build, penetrating concrete seal can be achieved with use of **Eco Bond** prior to application of the Polyaspartic.

Coating systems are susceptible to cracking if the concrete moves or separates below the surface. Joint

and crack treatment should be reviewed prior to coating application. Construction joints where slabs meet and can move, should be coated and then sawn through and an elastomeric caulking compound applied.

Apply by brush, roller, rake or squeegee. Mix, spread and level the material as quickly as possible. Immediately mix and pour onto the floor the next adjacent mix and repeat as close as possible. Delaying the adjacent area application can lead to witness marks or patchy application. Minimise rolling into previous section as this can cause undesirable stipple or poor levelling.

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 of any product

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

If swallowed, dilute with 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. Seek medical attention.

If on skin: wash with plenty of soap and water. May cause redness and irritation. If irritation persists, 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 liquid
Total solids by weight	100%
Tensile strength ASTM D412	42 mPa (6,000psi)
Ultimate elongation ASTM D412	8%
Hardness shored 24 hour	65
Abrasion resistance, CS 17 1000 cycles, 1 kg load	55mg loss
Gloss @ 60° angle ASTM D523	85 minimum
Mandrel blend	No cracks @ 180°C
Spread rate	5 – 20m ² per litre
Drying time at 25°C	30 minutes
Storage Period	2 years at 5-35°C
Packaging	6L kit Part A – 4L container Part B – 2L container

CHEMICAL RESISTANCE

Reagent	Rating
Brake Fluid	Recommended
Coolant	Recommended
Beer	Recommended
Citric Acid (30%)	Recommended
Diesel Fuel	Recommended
Petrol	Recommended
Transmission Fluid	Slight Discolouration
Battery Acid	Damaged
Hydrochloric Acid (15%)	Recommended
Orange Juice	Recommended
Sodium Hydroxide (50%)	Recommended
Sulphuric Acid (20%)	Recommended