

TECHNICAL DATA SHEET

SHIMISPART™ TOPCOAT UV SHIELD¹

Non-Yellowing UV-Stable Aliphatic Polyaspartic Topcoat

Two-component, solvent-free, UV-stable protective and decorative topcoat Product code SP03

1. PRODUCT DESCRIPTION

SHIMISPART™ TOPCOAT UV SHIELD is a two-component, solvent-free, aliphatic polyaspartic topcoat formulated as a decorative finish and durable protective coating for floors and other surfaces. A UV stabiliser package is incorporated to give long-term gloss retention and resistance to yellowing, making it suitable for surfaces in full sun.

The resin is an aliphatic ester with high resistance to solvents, acids and alkalis, and offers excellent hardness, adhesion, mechanical strength and durability across a wider application temperature range than epoxy. Unlike conventional polyurea, it has sufficient working time to be applied by brush and roller.

It is well suited as a finish coat over flake and quartz flooring, and over concrete, tiles, timber, steel, galvanised steel and aluminium.

2. TYPICAL USES

- UV-stable clear finish coat over flake, quartz and metallic floor systems
- Protective topcoat for outdoor concrete, paving, patios and pool surrounds
- Clear sealer for tiles, timber, polished concrete and exposed aggregate
- Protective coating for steel, galvanised steel and aluminium
- Anti-graffiti and easy-clean coating for walls and trafficked surfaces
- Finish coat in workshops, hangars, clean rooms and decorative architectural concrete

3. KEY FEATURES & BENEFITS

Non-yellowing	Aliphatic chemistry with a UV stabiliser package gives high UV stability and long-term gloss retention, without the colour shift seen with epoxy and aromatic polyurethane topcoats.
Suitable for full sun	Formulated for outdoor surfaces under direct sunlight and high UV exposure.
100 % solids	Solvent-free with nil VOC content. No dilution required.
Superior abrasion resistance	Harder wearing than epoxy, urethane and acrylic topcoats.
Broad adhesion	Bonds to concrete, tiles, timber, metal, glass, laminate, polished concrete and fibreglass-reinforced vinyl ester.
Water and chemical resistance	Suitable for water immersion; resists oils, most household chemicals, alkalis and high-pH conditions.
Wide cure window	Cures at surface temperatures from approximately 1 °C, through combined moisture and chemical curing.
Long shelf life	24 months. The product does not react with atmospheric moisture in the container, so part-used kits retain their integrity.
Tintable	Available clear or tinted to Australian Standard colours.
Easy application	Simple 1.5 : 1 mix ratio, applied by roller, brush or squeegee.

¹ SHIMICOAT Proprietary Coating System

4. COMPARISON WITH CONVENTIONAL TOPCOATS

Property	SHIMISPART™ UV Shield	Polyurethane	Epoxy
Typical cure time	12 hours	12 hours	12 hours
Mix ratio	1.5 A : 1 B	4 A : 1 B	2 A : 1 B
UV resistance	High stability — non-yellowing	Moderate — yellows over time	Low — yellows over time
Suitable outdoors	Yes	No	No

5. KIT SIZES

Kit size	Total volume	Part A — Resin	Part B — Hardener
Mini	1.25 L	0.75 L	0.5 L
Small	2.5 L	1.5 L	1 L
Medium	5 L	3 L	2 L
Large	7.5 L	4.5 L	3 L
XL	12.5 L	7.5 L	5 L
XXL	25 L	15 L	10 L

6. TECHNICAL PROPERTIES

Property	Typical value
Composition	Two-component, solvent-free aliphatic polyaspartic ester
Mix ratio	1.5 parts A : 1 part B, by volume or by weight
Solids content	100 % — solvent free
VOC content	Nil
Colour	Part A clear amber liquid; Part B crystal clear liquid. Cures water-clear. Tintable to Australian Standard colours.
Finish	Semi-gloss to high gloss
Odour	Low
Pot life at 20 °C	15 minutes
Surface dry at 20 °C	6 hours
Recoat at 20 °C	10 hours
Light foot traffic	16 hours
Full cure	7 days — vehicle traffic
Minimum application temperature	1 °C surface temperature
Application temperature	1 °C to 35 °C
Maximum service temperature	140 °C (typical, dry heat, fully cured)
Dangerous Goods classification	Not classified as a Dangerous Good for transport
Shelf life	24 months in sealed original containers, stored out of direct sunlight and heat

Values are typical for the product as supplied and are not a specification. Cure and pot life vary with temperature, humidity, film thickness and batch size.

7. CHEMICAL RESISTANCE

Media	Reagent	Rating
Acids	Hydrochloric acid	B
	Sulphuric acid	C
	Acetic acid	B
	Nitric acid (10 % max.)	C
	Phosphoric acid (25 % max.)	B
Alkalis	Sodium hydroxide	B
	Ammonium hydroxide	A
	Potassium hydroxide	B
	Sodium hypochlorite (bleach)	A
Solvents	Xylene	A
	Methyl ethyl ketone (MEK)	C
	Acetone	B
	Ethanol	A
Fuels	Diesel	A
	Petrol	A
	Kerosene	A
Foodstuffs	Wine and beer	A

Key to ratings

Code	Resistance	Description
A	Excellent	Suitable for long-term immersion
B	Good	Suitable for short-term immersion (3 days maximum)
C	Caution	Brief contact only — splash and spill
D	Not recommended	Do not expose

Indicative reference only, determined under laboratory conditions at 25 °C on a fully cured film. Carry out a site trial where chemical exposure is critical.

General resistance summary

Heat	Up to 140 °C (typical, dry heat, fully cured)
Water	Excellent — resists continuous and long-term immersion in fresh and salt water
Salts and brines	Resists continuous and long-term immersion in all salt and brine systems
Alkalis	Resists short-term immersion in all alkalis
Acids	Resists splash and spill in all acids
Solvents	Resistant to most hydrocarbon solvents and alcohols
Abrasion	Excellent once fully cured (7 days)

8. SURFACE PREPARATION

1. Ensure the surface is clean, dry and free of dirt, grease, oil, paint, curing compounds, laitance and all other contaminants.
2. Remove oil contamination with a degreaser and an alkaline cleaner, then pressure wash.
3. Grind or sand the surface to a mechanical key. Grinding is recommended before applying any Shimicoat polyaspartic product, as it gives the best adhesion. Where grinding is not practicable, acid-etch to open the porosity, then wash, rinse and flush to neutralise.
4. Remove all loose material, then vacuum or blow the surface clean and mask off areas that are not to be coated.
5. Run a dry test before coating: tape a plastic sheet over a small area of the surface, leave it for one hour, then lift it. If there is no moisture on either face, the surface is dry enough to coat.

Important

New concrete must be allowed to cure fully — a minimum of 28 days — before application. Refer to the Shimicoat Surface Preparation guide for further detail.

9. MIXING

1. Measure the components by volume or by weight at 1.5 parts Part A to 1 part Part B. For example, to prepare a 2.5 L mix, add 1 L of Part B to 1.5 L of Part A.
2. Combine Part B (hardener) into Part A (resin) and mix for a minimum of 3 minutes with a slow-speed drill mixer at no more than 750 rpm. Scrape the sides and base of the container so that no unmixed material remains.
3. For decorative work, add Shimicoat tints, metallics or glitters to Part A first and disperse fully before adding Part B.
4. The product is ready to use and does not require dilution.
5. Mix only the quantity that can be applied within the 15-minute pot life.

10. APPLICATION

1. Decant the mixed resin into a roller tray or pour it directly onto the prepared surface. Do not leave it standing in the mixing bucket.
2. Apply by roller, brush or squeegee. On horizontal surfaces, pour and spread with a squeegee, then back-roll to even the film.
3. Use steady, long strokes. Do not overwork the roller or push it too quickly, as this traps air and causes bubbles in the film.
4. Maintain a wet edge at all times and work to a natural break.
5. Apply two coats for full UV protection and gloss, observing the recoat window in Section 10. Lightly abrade and vacuum between coats where the recoat window has been exceeded.

11. CURE SCHEDULE & RETURN TO SERVICE

Surface temperature	Pot life (min)	Surface dry (h)	Initial cure (h)	Recoat (h)	Full cure (days)
10 °C	20	8	10	12	7
20 °C	15	6	8	10	7
30 °C	10	4	6	8	7

High temperatures, low humidity and windy conditions shorten these times. Keep foot traffic off for at least 16 hours and vehicles off for at least 7 days.

12. CLEANING

Clean tools and uncured spills with EpoDil thinner and diluent, or with xylene. Cured material can only be removed mechanically. Clean tools immediately after use.

13. STORAGE & SHELF LIFE

Shelf life	24 months from date of manufacture in sealed, unopened original containers.
Storage	Store between 10 °C and 30 °C, out of direct sunlight and away from heat. Keep containers tightly sealed when not in use. Protect Part B from moisture ingress.
Before use	Stir each component uniformly for 3 minutes before measuring and mixing.

14. HEALTH, SAFETY & HANDLING

- Do not apply if rain is expected within 24 hours of application.
- Ensure the surface is dry before coating. Moisture in the substrate causes blooming and delamination.
- Avoid application to hot surfaces or in direct sun. Never leave containers in direct sun during application — heat shortens the pot life.
- Do not apply if the concrete has a patchy appearance, which suggests moisture is present. Carry out the dry test first.
- New concrete must be allowed to cure fully, a minimum of 28 days, before application.
- Keep foot traffic off the coating for at least 16 hours and vehicles off for at least 7 days. Full hardness develops over 7 days.
- Heavy vehicles with hot tyres can damage a newly coated floor. Place a mat under each tyre for the first few weeks where vehicles are parked in one position.
- Keep containers sealed when not in use.
- Wear appropriate personal protective equipment and ensure adequate ventilation. Part B contains an aliphatic polyisocyanate — read the Safety Data Sheet before use.

Safety Data Sheet

A Safety Data Sheet for each component of this product is available at www.shimi.com.au or on request from info@shimi.com.au. Read it before use.

15. CONTACT DETAILS & DISCLAIMER

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Safety Data Sheet	A Safety Data Sheet for each component of this product is available at www.shimi.com.au or on request from info@shimi.com.au . Read it before use.

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