

## Technical Data Sheet

# 1545 - High Chemical Resistance Coating (Grey)



### Product Description

A solventless, two-component, Kevlar®-reinforced epoxy for use as a high chemical resistance protective coating.

Premium epoxy resins and curing agents are used for a high-quality, durable protective coating suited to industrial environments with aggressive chemical exposure.

### Uses

- Chemical-resistant protective coating for tanks, bunds, processing equipment etc.

### Technical Information

Vehicle Type: 2-pack epoxy/polyamine.  
 Colour: Grey.  
 Finish: Glossy, slight "orange peel" texture.  
 Cleaner: MEK, acetone, methylated spirits.  
 Mix Ratio: 5:3 v:v  
 Pack Size: 6.5 litres.  
 Solids: 100%

### Technical Advantages

- Non-hazmat - solventless, non-corrosive, non-flammable product for safer use and simplified, cheaper transport.
- Field-friendly - mix ratio tolerance and long storage life, combined with surface/moisture tolerance gives a truly field-friendly product.
- Resin, Kevlar® reinforcement and filler combination

- imparts impressive wear and impact resistance.
- Primerless, high-build protection with good sag resistance (sprayed at 300 microns vertically @ 25°C).
- Good tolerance of low temperatures.
- Good overall chemical resistance, including 98% sulphuric acid.
- Can be applied onto dry, damp or even wet surfaces - completely waterproof for protection against corrosion with no amine blushing.
- Solventless formulation with no strong odours can be applied in confined spaces without need for ventilation equipment or disruption to nearby people.
- 100% solids - long shelf life (don't have to use all at once) and no shrinkage in the coating film.

### Chemical Resistance to Spillage (for fully cured films)

10% Acetic Acid	50% Sodium Hydroxide
Bleach	98% Sulphuric Acid
Ethanol	10% Sodium Hypochlorite
Toluene	Xylene
Skydrol	Hydrocarbons/Fuels/Oils
Deionized Water	Trichloroethane

Note - Staining may occur when exposed to aggressive chemicals. Good housekeeping practices, including dilution and spillage clean up, will minimise chemical damage. For full immersion performance, contact supplier.

### Test Results

<b>Adhesion</b> ASTM D451/ISO 4624	Concrete - substrate failure in dry and wet
<b>Hardness</b> ASTM D-2280	76-81 Shore D

### Surface Preparation

Concrete - New concrete surfaces should be allowed to cure for a minimum of 28 days. Old, damaged and/or heavily contaminated concrete surfaces should be degreased with an appropriate detergent and patch repaired, if applicable, prior to surface preparation.

Diamond grind, shot-blast or water-blast (3000psi with rotary head) as required to obtain a clean, granular feel.

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Properly prepared surfaces should be structurally sound and free of contamination, laitance and any loose material. Ensure prepared surface is clean, dry and dust-free again if there's a delay between preparation and application.

Coated Surfaces - Can be over-coated providing they're in good condition and there are no adhesion issues. Perform a small adhesion test in an inconspicuous area if in doubt. Clean the coat first, rinse thoroughly and dry before sanding with 80-120 grit paper. Vacuum and then wipe with methylated spirits to remove all dust.

Metal - High-pressure water-blasting or abrasive blasting to class 2.4 (AS 1627.4) with a typical profile of 50-70 microns in a jagged pattern. Grinding acceptable for small areas. Can be applied over tight rust.

## Mixing

For full safety instructions, consult SDS. Wear protective clothing, goggles and gloves to prevent skin and eye contact.

Mix product at a ratio of 5:3 by volume with a drill mixer. Pour Part B into Part A and mix until a consistent colour is obtained, scraping sides with a flat spatula to ensure all product is taken in.

## Application

Airless Spray (plural or single component), Brush, Roller. Minimum application thickness @ 25°C - 200 microns. Typical application thickness @ 25°C - 300 microns.

## Coverage

The actual coverage achieved by 1545 will depend on the substrate characteristics and condition.

The theoretical yields for a 300-micron coating film (recommended) are:

6.5L kit @ 3.33m<sup>2</sup>/L - 21.67m<sup>2</sup>

## Cure Schedule

	<b>Time (@ 25°C)</b>
Pot Life	- 25 minutes
Set (touch)	- 6 hours
Set (hard)	- 15 hours
Re-coat (min.)	- 15 hours
Re-coat (max.)	- 36 hours
Full Cure	- 7 days

Approximate time frames for full kit. Pot life will shorten for larger mixes. Times will decrease as the temperature increases. Abrade the surface before re-coating if the film has become hard and glossy.

## Product Characteristics

- 1545 has thixotropic properties, which give the wet film good sag resistance on vertical surfaces. Thickness should not exceed 300 microns when sprayed at temperatures greater than 25°C.
- Coating systems exposed to aggressive chemicals should consist of 2 x 300 micron coats as a minimum.
- If more than one kit is mixed at a time, the product can reach dangerously high temperatures and experience a significantly reduced pot life.
- Should not be applied in temperatures lower than 5°C.
- Consistent with all epoxies, 1545 will tend to chalk and discolour upon extended UV exposure. This doesn't detract from coating performance.
- Non-flammable and doesn't pose a fire risk.

## Storage & Disposal

Keep containers closed when not in use. Store below 50°C. Do not store in direct sunlight. Shelf life is at least 12 months in original, unopened container. Seek advice from your local council regarding accepted disposal methods.

## First Aid

### **CAUTION: KEEP OUT OF REACH OF CHILDREN.**

IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Immediately call a POISON CENTRE (Australia - 13 11 26) or doctor/physician. If skin irritation occurs: Get medical advice/attention.



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