

SOLIDGUARD 227

Water-Based Zinc Phosphate High Build Epoxy Coating

Solidguard 227 is a self-priming, water-based, zinc phosphate high-build epoxy coating system.

BENEFITS:



Excellent film build and edge protection.



*VOC compliant.
Potable water safe.*



*Potable water safe.
FDA compliant for food contact.*



Multi surface and industry coating.



Green concrete surface compatible.

APPLICATIONS:

- Piping interior lining
- Mining structures
- Metal roofing
- Offshore equipment, marine environments

CHARACTERISTICS

- Excellent chemical and corrosion resistance to a wide variety of substrates in the minimum number of coats.
- The product is a high solids, high-build, potable water coating widely used for lining interior steel and concrete tanks, valves and piping.
- Formulated for application at conventional builds (400 - 600 um per coat) as well as high builds up to 1000 um.

- Its superior adhesion properties allow it to be applied over marginally prepared rusted steel surfaces.
- Its high solids formulation allows **Solidguard 227** to be applied over most old existing coatings without lifting or wrinkling.

TECHNICAL DETAILS

Appearance	Liquid resin
Colour	Various
Solids Content	75 % ± 2 %
Mix Ratio	Mix as supplied
Pot Life @ 25 °C	20 - 25 minutes
Priming	Self-priming
Finish	Gloss
V.O.C	215 g / L
Tack Free	4 - 6 hours
Topcoat	12 hours
Full Cure	7 Days
Coverage	30 m ² per kit @ 125 um 20 m ² per kit @ 250 um
Application Conditions	10 - 32 °C 0 - 80 % Relative Humidity

PACKAGING

Solidguard 227 is supplied in 5 and 25 L kits.

CHEMICAL RESISTANCE (SPLASH OR SPILLAGE):

Acids	Fair to good
Alkali	Very good
Salts	Excellent
Solvents	Fair to good
Water	Excellent

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PRECAUTIONS

- Do not apply below 10 °C.
- White or light colours may illustrate slight yellowing from UV radiation.
- Not UV stable – interior application only.
- Avoid allowing product to stand in the sun before use as this will shorten the pot life considerably.

SUBSTRATE CONDITIONS

CONCRETE OR MASONRY

- May be applied to green concrete.
- For proper bonding, apply over a clean, sound surface.
- Remove any existing oil, grease, wax, dirt, or foreign matter by washing with a suitable detergent.
- Remove any existing laitance on concrete surfaces.

STRUCTURAL STEEL

- Surfaces must be clean, sound, and free from oil, grease, wax, and loose or foreign material.
- Minimum requirements: Hand or power tool cleaning.
- Clean in order to remove any loose rust, mill scale, paint and other foreign matter.
- Dry abrasive blasting to a brush off blast is a more effective cleaning method and should be considered when feasible.
- For extreme or severe exposure, the surface maybe dry abrasive blasted to a commercial finish.
- Dry abrasive blast in order to remove at least two thirds of all visible rust, mill scale, paint, and other foreign matter.
- Chemical cleaning can also be used if necessary.
- Apply **Solidguard 227** as soon as possible after cleaning and before flash rusting can occur.
- Recoat if necessary.

GALVANIZED STEEL

- Surface must be clean, sound, and free from oil, wax, and loose matter.
- Degrease by solvent wiping.
- For old galvanized steel, hand or power tool cleaning is acceptable.

EXISTING COATINGS

- Apply over clean, sound coatings.
- If the existing coating is brittle, eroded or under film rusting exists, or if less than 75 % of the film is intact, the coating must be totally removed by brush blasting.
- For sound existing coatings that are 75 % intact, remove any oil, grease, wax or foreign matter.
- Remove any remaining gloss or loose existing coating by hand or power tool.

MIXING & THINNING

- Power mix Part B (Hardener) separately then combine with Part A (Resin) and power mix for a period of 3 minutes. Do not attempt to mix partial kits.
- Mix the product only as supplied as the mix ratio is not volume based.
- Ensure thorough mixing by transferring to another vessel and mixing again.

APPLICATION EQUIPMENT

This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

CONVENTIONAL SPRAY

- Thinning may be between 5 - 10 %.
- Thinner: Solidkote 505 Epoxy Thinners only
- Pressure pot equipped with dual regulators
- Material Hose: **3/8" I.D. (min)**
- Tip Size: **.070"**

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AIRLESS SPRAY

- Thinning may be between 5 - 10 %.
- Thinner: Solidkote 505 Epoxy Thinners only
- Pump ratio: **30:1 (min.)**
- GPM Output: **3.0 (min.)**
- Material Hose: **3/8" I.D. (min.)**
- Tip Size: **.017-.021"**
- Output Psi: **2100-2300**
- Filter size: **60 mesh**

Teflon packings are recommended and available from the pump manufacturer. Use 45:1 pump ratio for elevated applications and 1/2" I.D. for hose lengths greater than 60'.

BRUSH/ROLLER

- Not recommended for tank lining applications except when striping welds.
- Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding.
- Avoid excessive re-brushing or re-rolling.
- For best results, tie-in within 10 minutes at 25°C.
- Use a medium bristle brush.
- Use a short-nap mohair roller with phenolic core.

HEALTH AND SAFETY

All appropriate PPE must be worn.

Please read the Material Safety Data Sheet and specific health and safety data for this product provided in compliance with the requirements of OHSA No.85 of 1993. The finished system is not hazardous to health or the environment.

WARRANTY

Technical Finishes products are manufactured under high quality standards and are warranted against defective materials and are sold subject to standard Terms and Conditions of Sale, copies of which can be obtained upon request. Technical Finishes deals with approved applicators and carry a back to back warranty with these clients. Technical Finishes cannot be held responsible for the workmanship in surface preparation and application of our products, it is understood that the approved contractor will guarantee such workmanship and application. It is vital that the application is done in accordance to our specification.

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