

## **TECHNICAL DATA SHEET**

**SOLIDGUARD 230** 6 August 2021, Rev 4

# **SOLIDGUARD 230**

High Build Epoxy Tar Coating

Solidguard 230 is a two-component, solvent free, liquid epoxy resin modified with refined coal tar pitch.

#### **BENEFITS:**



Heavy duty protective coating. High build coating. Good abrasion resistance.



Waterproof coating.



No primer required.



Easy application: brush, roller or spray.

Seamless finish.



Excellent chemical resistance.



High flexibility and thermal shock stability.



Long term corrosion protection.

## **APPLICATIONS:**

- Lining of tanks, pipes, ducting
- Coating concrete, asbestos cement
- Steel piping, non-ferrous metals
- Sewerage works
- Offshore marine environments

TECHNICAL DETAILS	
Application	Trowel, Brush or Spray
Finish	High gloss
Profile	Smooth
Solids	80%
Application Temp	5 - 30°C
Pot Life	1 hour at 25°C
Coverage Trowel	2.4 m <sup>2</sup> / L at 400 um
Coverage Roll-On	3.2 m <sup>2</sup> / L at 300 um
Spray on method	6.0 m <sup>2</sup> / L at 150 um
Surface dry at 25°C	6 hours
Over Coat	Min - 12 hrs Max - 36 hrs
Mix Ratio	1:1
Colour	Black
Thinners	Solidkote 505 Epoxy Thinners
Shelf Life	12 months
PACKAGING	
Two component, 5 L and 20 L kits.	

## **CHARACTERISTICS**

- The superior adhesion, chemical resistance, flexibility and water-resistant properties of the system, provide a high build, ultra-dense coating to protect a multitude of substrates against a wide range of aggressive substances.
- Can be used as a primer system of bituminous substrates such as tar or asphalt onto which either epoxy or polyurethane topcoats are compatible.
- The coating will not support the growth of bacteria.
- Smooth, black with a high gloss finish.

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## SUBSTRATE REQUIREMENTS

- Surfaces to be coated must be sound, dimensionally stable, clean, dry and free from laitance, dust and oils.
- Old existing coatings should be mechanically removed with appropriate equipment.
- Curing compounds, release agents and grease must be removed.
- Degreasing may be performed by use of Liquid Action (see datasheet).
- Concrete must be fully cured for a minimum of 28 days.
- Grit blasting, high pressure water jetting or mechanical scabbling may be necessary to ensure full removal of cement laitance and deleterious matter.
- Metal surfaces should be prepared by blast cleaning to a minimum 70 um profile, SA 2½.
- Blow holes, pin holes and other surface defects should be filled with **Techfin GP Epoxy**.

## **MIXING**

- Solidguard 230 is supplied in pre-weighed units.
- Mix the hardener component separately for 1 minute and then decant into the resin component and mix for a period of 3 minutes using a slow speed high torque frill with suitable paddle attachment until a uniform streak-free mixture is obtained.
- During the mixing process make sure the material around the sides and bottom of the container are well mixed.

## **WATCH POINTS**

- No additions or omissions are required and on no account should the Solidkote 230 kits be split.
- Unsuitable in situations where foodstuffs or potable water will be in contact with the coating.

#### **APPLICATION**

#### BRUSH / ROLLER / TROWEL

- Apply the mixed product to a properly prepared substrate using a brush or short hair roller.
- The use of a painter's tray is essential to extend the working life of the product and correctly measure the material on to the brush or roller.
- Working well into the substrate to give complete coverage with no visible pinholes, apply in two coats at a rate of 16m<sup>2</sup> / 5 L kit to obtain a film thickness of 300 um.
- Alternatively pour out the mixed product onto the designated and prepared substrate and spread using a trowel in a scraper coat fashion, then using a roller back roll the product to ensure full coverage and proper film thickness which also creates a uniform finish.

#### **AIRLESS SPRAY**

- Recommended for large applications.
- Conventional pressure pot equipment may also be used but must be tested to access suitability.
- Thinner: Solidkote 505 Epoxy Thinner
- Nozzle Orifice: 0.5 mm
- Nozzle Pressure: 12 16 MPa (120 - 160 bar, 1740 - 2321 psi)
- Spray the Solidguard 230 onto the prepared surface to achieve a minimum film thickness of 300 um in two coats.
- To achieve greater thicknesses allow the product to cure before applying subsequent coats.
- To give specified protection, a minimum of two coats should be applied.

#### **COVERAGE**

**Note:** Coverage is dependent on porosity of the substrate as well as surface texture.



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## CHEMICAL RESISTANCE

## General exposure:

 $0.3\,L\,/\,m^2$  for a total film thickness of 300 um minimum applied in two coats of 150 um each.

### Cured Coating is resistant to:

- Distilled water
- Brine
- Effluent
- Barnacle growth
- Sewage
- Exhaust gases
- Marine bacteria
- Diluted acids and alkalis
- Salt solutions (Potassium, Sodium).

### **HEALTH AND SAFETY:**

The system contains strong solvents - there must be no open flames or smoking in the vicinity. All appropriate PPE must be worn.

Please read 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 contractor will guarantee approved workmanship and application. It is vital that the application is done in accordance to our specification.