

Epoxy Phenshield Primer

Solvent based phenolic epoxy primer

Description:

A two-component phenolic epoxy amine cured pigmented primer coat.

Intended Uses:

A high build heavy duty primer that has excellent adhesion to steel. It has excellent resistance to a wide range of solvent & mineral acid vapours when over coated with Specialized Coating Systems Epoxy Phenshield Topcoat. This system is used as a protective coating for steel and concrete surfaces in chemical processing plants, pulp, and paper mills and for the protection of structural steel against severe splash, spillage, and fume conditions.

Features & Benefits:

- Excellent adhesion to steel surfaces.
- Cures to a hard-matt surface that can be over-coated within 16 hours.
- Suitable for damp, chemical environments such as pulp and paper mills.
- When over coated by two coats of Specialize Coating Systems Epoxy Phenshield Topcoat, the system provides excellent protection to surfaces exposed to chemical environments.

Exposure	Splash & Spillage	Fumes
Acids	Not recommended	Excellent
Alkalis	Not recommended	Excellent
Solvents	Excellent	Excellent
Salt	Excellent	Excellent
Water	Excellent	Excellent

Technical Data:

Colour	Red oxide or Light Grey
Appearance	Smooth
Mix Ratio (Volume)	4 : 1
Activator	Epoxy Activator Phenshield Primer
Induction Period	Not required
Density	1.55 Kg/ Litre (Mixed)
Volume Solids	66% +/-2%
Typical Film Thickness	125 – 175µm DFT (200 – 265µm WFT)
Theoretical Coverage	3.5 – 5.3 m ² / Litre, allow for loss factors
Method of Application	Brush, roller, or spray
Temperature Resistance	Dry continuous – 150°C
Number of Coats	1

Drying Information:

@ 100µm DFT	0°C	10°C	15°C	25°C	30°C	40°C
Touch Dry	-	-	-	3 hrs	-	-
Hard Dry	-	36 hrs	24 hrs	16 hrs	10 hrs	-
Full Cure	-	14 days	10 days	7 days	5 days	-
Overcoating Data – See Limitations						
Substrate Temp.	0°C	10°C	15°C	25°C	30°C	40°C
Minimum	-	36 hrs	24 hrs	16 hrs	10 hrs	-
Maximum	-	60 hrs	48 hrs	36 hrs	24 hrs	-

Note:

*See Specialized Coating Systems Definitions and Abbreviations.

Before overcoating visible surface contamination must be removed by high pressure water cleaning, sweep blasting or mechanical cleaning.

Surface Preparation:

Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulated dirt. Soluble salts should be removed by freshwater rinsing. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. If oxidation has occurred between blasting and application of Epoxy Phenshield Primer, the surface should be re-blasted to the specified visual standard.

Surface defects revealed by the blast cleaning process should be ground, filed or treated in the appropriate manner. A surface profile of 30 – 50 microns is recommended.

Concrete

Remove all dirt, oils, grease etc. and any loose material. All laitance should be removed by light abrasive blasting. Holes in concrete should be filled with an approved filler.

Application:

Mixing	Material is supplied in two containers as a kit. Always mix a complete kit in the quantities supplied. Once mixed the product should be used within the pot life specified. Stir the base component well with a flat-bottomed paddle or mechanical mixer until product is uniform. Continue stirring and add the entire contents of the activator container. Continue stirring until the mixture is homogeneous. Ensure that sufficient material be mixed so that the product can be applied within its use-able life. The temperature of the mixed product should preferably be above 15°C, otherwise extra solvent may be required to obtain application viscosity. Too much solvent will result in reduced sag resistance and slower cure.		
Pot Life	2 hours at 25°C		
Thinner	SA65 Thinners	0 – 20% depending on application	
Airless Spray	Tip range 15 – 21 Thou. Pressure at the tip should not be less than 150 bar (2200 PSI)		
Air Spray	Recommended	Gun	Pressure/Gravity Feed
		Fluid Tip	1.8mm to 2.2mm
Brush/Roller	Suitable	Typically, 50 – 70µm can be achieved	

Industrial & Protective: Acid & Chemical Resistant

Whilst we endeavour to ensure that all advice we give about the product is correct, the information given in this data sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so entirely at his own risk. As conditions of use, method of application and suitability of the substrate prior to painting are beyond our control, no guarantee is implied by the recommendations contained herein. We therefore do not accept any liability whatsoever or howsoever arising from the performance of this product or for any loss or damage arising out of the use of this product. The information contained in this sheet is liable to modification from time to time in the light of experience and ongoing product development programmes. It is the user's responsibility to ensure that this sheet is current prior to using the product

Work Stoppage	Thoroughly flush all equipment with SA65 Thinners . All unused material should be stored in tightly closed containers. Partially filled containers may show surface skinning and/or a viscosity increase of the material after storage. Material should be filtered, and viscosity re-adjusted before use.
Clean Up	Clean all equipment immediately after use with SA65 Thinners . It is good working practice to periodically flush out the spray equipment during the course of the working day. Frequency of cleaning will depend upon the amount sprayed, temperature and elapsed time, including delays.

Environment:

	Surface Temperature	Ambient Temperature	Relative Humidity
Minimum	10°C*	10°C	No lower limit
Maximum	40°C	45°C	90%

* Or 3°C above dew point. Adequate ventilation must be maintained during application and curing.

Limitations:

- The product will chalk on the surface when exposed to sunlight.
- Due to rapid cross linking, if the recommended overcoating interval is exceeded, sanding of the surface is mandatory.
- Not recommended for immersion service or continuous spillage of hot or concentrated acids.
- Overcoating information is given for guidance only and is subject to local climate and environmental conditions. Consult a Specialized Coating Systems representative for specific recommendations.
- Test performance results were obtained in a controlled laboratory environment and Specialized Coating Systems makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary, due care should be exercised in the selection and verification of the performance and use of the coating.

Pack Size:

5 & 20 Litre.

Storage:

- Shelf Life: 12 months at 25°C from date of manufacture. Subject to inspection thereafter.
- Store in dry conditions out of direct sunlight, away from sources of heat or ignition.
- Store at temperatures between 5°C and 35°C

Precautions:

For complete safety and handling information please refer to the appropriate Safety Data Sheets prior to using this product.