



Performance Coatings & Finishes

Steelguard 3290

High solids epoxy zinc phosphate primer

Product Data/ Application Instructions

- **Rapid drying two pack epoxy zinc phosphate primer**
- **EPA compliant (1998) in accordance with PG6/23**
- **High build, high solids and low VOC**
- **Corrosion inhibiting**
- **Excellent adhesion to blast cleaned steel**
- **Excellent abrasion and impact resistance**
- **No maximum overcoating restrictions**

Typical Uses

Anticorrosive primer or primer intermediate coating for general structural steelwork operating in moderate corrosive environments. Ideal for use as a one coat functional finish or primer in CIRIA report 174 specifications.

Overcoating

Typically overcoated with Ameron two pack epoxy and polyurethane topcoats. There are no maximum overcoating restrictions with these products provided the Steelguard 3290 is clean, dry and free of contamination before overcoating. For overcoating with other coatings please contact your Ameron representative.

Physical Data

Finish	low sheen
Colour	red oxide, light grey, grey, buff and off white.
Components	2
Mixing ratio (by volume)	
resin	6.2 parts
cure	1 part
Curing mechanism	solvent release and reaction between components. Effective cure down to 5°C/41°F

Volume solids :	72+/-3%
VOC	245 g/l
Dry film thickness	75-200 µm per coat

	typical	minimum	maximum
Dry film thickness (µm)	75	75	200
Wet film thickness (µm)	101	101	270

(wet film thicknesses quoted are typical for one airless spray coat)

Number of coats	1
Calculated coverage	9.6 m ² /l at 75 µm dft
Allow for application losses, surface irregularities, etc.	
Specific gravity	1.6 kg/l (mixed product)

Flash points		
(Closed Cup).....	°C	°F
resin	24	75
cure	24	75
Amercoat 18	25	77
Amercoat 12 cleaner.....	24	75

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Surface preparation

Surfaces must firstly be thoroughly cleaned of all contaminants such as dust, dirt, oil, grease and salts. Then abrasive blast clean to ISO 8501-1, Sa2^{1/2}. The blast profile achieved should be within the range 50 to 100 microns. Priming should occur before degradation of the surface takes place. If oxidation occurs then the surface should be re-prepared. The surface must be dry and free of dust, salts, grease and other contaminants immediately before coating.

Mixing

Stir the resin component thoroughly, then add the cure and continue mixing until the product is uniform throughout. A powerful mixer should be used.

Application

AIRLESS SPRAY: Use standard airless spray equipment capable of producing a minimum pressure at the tip of 2800 psi (200 kg/cm²). Tip size range 15-21 thou (0.38-0.53mm). Adjustments to pressure and tip size/angle may be necessary to obtain spray characteristics required for specific substrate configurations.

BRUSH/ROLLER: Application by these methods should be limited to small areas only such as repairs and when stripe coating. Apply evenly using a clean, well-loaded brush or roller. With this application more than one coat may be necessary to achieve the required dry film thickness.

Application Data

Substrate blasted steel
Application methods airless spray, brush or roller
Potlife (at 20°C/68°F) 2 hours
Induction time (at 20°C/68°F) not applicable

Environmental conditions

Steelguard 3290 should only be applied within the limits of temperature and humidity set out below.

Relative humidity: Up to 90%
Surface temperature: Minimum 2°C/36°F
..... Maximum 40°C/104°F

The surface temperature must also be at least 3°C/5°F above the dew point during application.

As with most coatings early contact with water can result in water spotting damage. Care should be taken to protect the coating during the early stages of cure to prevent water marking.

Drying characteristics	°C/°F		
	Temperature	5/41	10/50
Touch dry	4 hours	2 hours	1 hours
Hard dry	8 hours	5 hours	2 ^{1/2} hours
Overcoating (minimum)	8 hours	5 hours	2 ^{1/2} hours
Overcoating (maximum)	-	-	-

This product will cure down to 0°C/32°F, however drying times will be extended.

Note: All information relates to the typical dry film thickness.

Thinner Amercoat 18
Cleaner Amercoat 12 cleaner

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Application procedure

1. Clean the equipment with the recommended cleaning solvent before use.
2. Stir the resin component thoroughly, then add the cure and continue mixing until the product is uniform throughout. A powerful mixer should be used. Thinning is not required.
3. For airless spray, apply a wet even coat in parallel passes. Overlap each pass by 50% to avoid bare areas, pinholes or holidays.
4. Give special attention to welds, rough spots, sharp edges and corners, rivets, bolts, etc.
5. Application at 104µm wet film thickness will normally provide 75µm dry film.
6. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. If less than specified thickness, apply additional material as needed.
7. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas either by spray, brush or roller using Steelguard 3290.
8. In confined areas ventilate with clean air during application and drying. The humidity should be maintained below 90% and the temperature such that moisture condensation will not form on the surface.
9. Clean all equipment with fresh, clean solvent immediately after use.

Before using the product, read the label on the can and consult the material safety data sheet.

Shipping Data

Packaging.....	20 litres in two part units
resin	17.23 l in 20 l can
cure	2.77 l in 5 l can

Shipping weight (approx)	
resin	31 kg
cure	4 kg

Shelf life	1 year from shipment date or as indicated on label when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F).
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Safety

Since improper use and handling can be hazardous to health and cause of fire or explosion, safety precautions included with Product Data/Application Instruction and Material Safety Data Sheet must be observed during all storage, handling, use and drying periods.

Warranty

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron's option, to either replacement of products not conforming this warranty or credit to Buyer's account in the invoiced amount of the non-conforming products. Any claim under this warranty must be made by Buyer to Ameron in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify Ameron of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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Due to Ameron's policy of continuous product improvement, the information contained in this Product Data/Application Instructions sheet is subject to change without notice. It is the Buyer's responsibility to check that this issue is current prior to using the product. For the most up-to-date Product Data/Application Instructions always refer to the Ameron Performance Coatings & Finishes website at www.ameroncoatings.com

To avoid any confusion that may arise through translation into other languages, the English version of the Product Data/Application Instructions will be the governing literature and must be referred to in case of deviations with product literature in other languages.

Condition of Sale

All our transactions are subject to our Terms and Conditions of Sale.

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