



# Steelguard 3291

VOC compliant two pack epoxy MIO

## Product Data/ Application Instructions

- EPA compliant (1998)
- High solids
- Easy to apply
- Excellent abrasion and impact resistance
- Tough and durable
- No maximum overcoating restrictions

### Typical Uses

Build coat or functional finish for::

- general structural steel
- plant and equipment

Suitable for use in CIRIA Report 174 specifications

### Surface Preparation

STEEL - Applied over a suitable anti-corrosive primer.

NOTE - The surface must be dry and free of dust, salts, grease and other contaminants immediately before coating.

### Physical Data

Appearance when dry .....	low sheen
Colour .....	natural grey, medium grey
Components .....	2
Mixing ratio by volume	
Resin.....	5 parts
Cure .....	1 part
Volume solids .....	73 ± 3%
VOC .....	245 g/l
Curing mechanism .....	solvent release and chemical reaction between components Effective cure down to 5°C.

	typical	minimum	maximum
Dry film thickness (µm)	125	100	250
Wet film thickness (µm)	171	137	342
(Wet film thicknesses quoted are theoretical for one airless spray coat)			
Theoretical coverage .....	5.8 m <sup>2</sup> /l (at typical dft)		
Specific gravity .....	1.63 kg/l. (mixed product)		
Flashpoint			
(closed cup) .....	°C	°F	
Resin.....	24	75	
Cure .....	25	77	
Amercoat 12 .....	24	75	

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## Overcoating

Can be overcoated with suitable finishes from the Ameron Coatings range. For overcoating with other coatings contact your Ameron representative.

NOTE - 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 permanent water marking.

## Application Methods

AIRLESS SPRAY - Use a pump of minimum ratio 45:1

(Graco "King" or equivalent) capable of producing a minimum pressure at tip of 2800 psi (200 kg/square centimetre). Tip size 17-19 thou' (0.43-0.48mm).

BRUSH - small areas only.

## Application Data

Substrate ..... primed steel

Application methods ..... airless spray

Potlife (at 20°C/68°F) ..... 2 hours

### Environmental Conditions

Relative humidity: ..... up to 90%

Surface temperature: ..... minimum 2°C/36°F

..... maximum 30°C/86°F

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

### Drying Characteristics °C/°F

Temperature	5/41	10/50	20/68
Touch dry	4 hours	2 hours	1 hour
Hard dry	8 hours	5 hours	2½ hours
Full cure	5 days	4 days	3 days
Overcoating (minimum)	8 hours	5 hours	2½ hours
Overcoating (maximum)	No maximum overcoating time with other suitable Steelguard products		

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

NOTE: drying and curing times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are shorter at higher temperatures and longer at lower temperatures

Thinner ..... normally not necessary

Cleaner ..... Amercoat 12

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## Application Procedure:

1. Flush equipment with recommended cleaner before use.
2. Stir resin (in the larger container) to an even consistency with a power mixer.
3. Add cure to resin and continue stirring for 5 minutes. NOTE: Since the potlife is limited and shortened by high temperatures, do not mix more material than will be used within the potlife period.
4. Thinning is normally not required for airless spray.
5. Stir during application to maintain uniformity of material. Apply a wet even coat in parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
6. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
7. Application at 171 µm wet film thickness will normally provide 125 µm dry film.
8. 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.
9. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray.
10. In confined areas ventilate with clean air during application and drying until all solvents are removed. Temperature and humidity of ventilating air must be such that moisture condensation will not form on surface.
11. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift. When left in spray equipment, the product will cure and cause clogging.

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

## Shipping Data

Pack size .....	20 litres in two part units
Shipping weight	
Resin.....	approx. 32 kg
Cure .....	approx. 4 kg
Shelf life .....	1 year when stored indoors in unopened, original containers at 5 to 35°C (41 to 95°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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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.

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