





#### INDUSTRIAL COATINGS

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# **EPOX ST ALUMINIUM, series 703311**

# **Description and main features**

Two pack Surface Tolerant MIO epoxy primer containing zinc phosphate.

Excellent adhesion on steel, hot dipped galvanized steel and, further to testing to ensure adhesion, on most of the metals. Best used where sand blasting is an issue, thanks to its wetting properties; it can be applied at high DFT even with high RH and low temperature.

High chemical resistance. Good resistance to most of the hydraulic oils up to 120 ℃.

**Recommended use:** as a primer on blasted steel and hot dip galvanized steel; as a primer on old paints or where surface preparation is hard to get; as an intermediate coat on top of Inorganic Zinc Silicate or Zinc Rich Epoxy; it can also be used as finish coat where aesthetic is not a top requirement.

## Technical data

Finish	Satin (*)		
Color	Aluminium approx. RAL 9006. Other shades on request (*) (**)		
Specific gravity	1,40 ± 0,05 kg/dm³ at 23 °C referring to 700311 cured with 701464 1,38 ± 0,05 kg/dm³ at 23 °C referring to 700311 cured with 701471 or 701477 according to ISO 2811-1 (*)		
Solid content	By weight 82% ± 3 referring to 700311 cured with 701464 76% ± 3 referring to 700311 cured with 701471 or 701477 (*)		
	<b>By volume</b> 72% ± 3 referring to 700311 cured with 701464 64 % ± 3 referring to 700311 cured with 701471 or 701477 (*)		
VOC	180 g/kg referring to 700311 cured with 701464 (*)		
Viscosity	Brookfield on the base at 23 ℃ (spindle 3, 0.5 RPM) : < 300.000 mPas according to internal method MS 007 (*) (**)		
Drying time	At 23 °C ,50% RH, good ventilation, DFT 150 μm with 701471-701477 701464 Touch dry: 8 h 6 h Hard dry: 24 h 24 h Touch dry: according to internal method MS 035 based on ISO 4622 Hard dry: according to internal method MS 036 based on ISO 4622 (*)  Drying times can vary depending on DFT and environmental conditions		









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# Mixing and thinning

Mixing ratio	By weight: 100:25 with 701464
Pot life	8 h at 20 °C - Data vary with temperature and thinning.
Thinning	5-10% by Thinner 900033 or 901040 winter type 5-10% by Thinner 903015 or 901042 summer type 5-10% by Thinner 903014 slow Chose the thinner according to the environmental and application conditions in order to allow at least 5-10' drying time.

# **Application data**

Method	Airless o air mix for brush or roller application, specific curing agent and thinners must be used.		
Airless or air mix	Pump ratio	45:1	
	Nozzle orifice	015-017"	
	Nozzle pressure	140-180 atm	
	Filters must fit the used nozzle.		
	Indicative data; it is the user's responsibility to chose the right equipment.		
Suggested Primers	None It can be applied on top of Inorganic Zinc Silicate series 706205-760210 or Zinc Rich Epoxy series 706176 - 706192.		
Suggested Topcoats	Retron Acrilico 773.000-777.000-778.000 or epoxy 700.000-702.000		
Application conditions	Application suggested between 0°C and 30°C and at least 3°C above dew point. Substrate perfectly dry and clean, no rain nor fog. A sandblasting to SA 2 ½ according to ISO 8501-1: 1988 ensures the best performance in terms of salt fog resistance. When used on top of old alkyd paints, a mechanical cleaning of the surface (PSt2 according to ISO 8501-2) is recommended. The product can be over coated between 1 and 7 days from the application, at 20°C, 50% RH, and good ventilation. After 7 days and up to 3 months a careful cleaning is needed before over coating. After 3 months a surface roughening is needed before over coating.  Data vary with DFT and environmental conditions		







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## **Recommended DFT**

Recommended DFT	100-200 μm
Theoretical consumption	approx. 195-390 g/m² cured with 701464
Consulaption	approx. 215-430 g/m² cured with 701471 o 701477 (*)
Practical spreading rate	30-40% lower than the theoretical, by airless application.
Number of coats	ONE or TWO

# Specific tests

### Salt spray test according to ISO 9227:2006

Steel samples coated by Epox ST 703311 cured with 701471 showed no defects after > 1000 h.

### Continuous condensation test according to ISO 6270

Steel samples coated by Epox ST 703311 cured with 701471 showed no defects after > 1000 h.

## Storage indications

Shelf life: 12 months (base only: 18 months), provided the cans are kept sealed and undamaged, into a cool and dry place with temperature between 5 and 35 °C.

### Usability according to DL 27.03.2006 n °161

No limitations. It belongs to category j) Two component, high performance solvent based paints. 2010 limit = 500  $\alpha/l$ 

(\*) indicative value, depending on the color - (\*\*) parameters subject to testing for each batch

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