

# Alesta® EP

## Anticorrosive Primer EP Primer

### EP90017275721 FUNCTIONAL PRIME ± RAL 7030

Alesta® Functional Prime is an anticorrosion powder primer designed for ferrous and non ferrous substrates. Formulated to be overcoated with some recommended Alesta® polyester topcoats (Alesta® IP, AP, SD), Alesta® Functional Prime makes up a whole system that isolates the substrate from its environment and improves corrosion protection.



#### Characteristics

- Gloss Smooth
- Solid
- Tribo/Corona

#### Usage Area

- Protection and decoration of interior parts
- Gas or liquid tanks, pipelines, structural steelwork, trucks, trailers & car parts



#### Approvals

Marine	CE 2690 (Fr)
UL	MH45216 (Fr)



- This powder coating complies with the European Directives "Restriction of the use of certain hazardous substances" 2011/65/EU and 2015/863/EU (RoHS)
- Classification A2 (non flammable) of reaction to fire in accordance with NF EN 13501-1+A1 : 2013

The following data has been obtained under laboratory conditions as described below. Actual product properties such as gloss, colour and finish may vary depending on application conditions.



#### Test Conditions

- |  |  |
|--|--|
| • Curing Conditions (object temperature) | 7 min @ 180°C                                    |
| • Substrate                              | 0,8 mm Iron phosphated & passivated steel panels |
| • Film thickness                         | 60 ± 10 µm                                       |
| EN ISO 2360                              |  |

#### Physical Data

- |            |            |
|------------|------------|
| • Density  | 1,54 g/cm³ |
| calculated |            |



## Product Performance / Film Properties

Gloss @ 60° 90 ± 5  
EN ISO 2813

Impact Resistance 1 kg / 50 cm  
EN ISO 6272

Adhesion GTO  
EN ISO 2409

Erichsen Cupping 8 mm  
EN ISO 1520

Cylindrical Mandrel Bending 3 mm  
EN ISO 1519

## Neutral Salt Spray Test results (according to ISO 9227)

- Film thickness EP90017275721: 60-70 µm  
Topcoat Alesta® AP: 60-70 µm
- Curing conditions EP90017275721: 17 min @ 160°C  
Topcoat Alesta® AP: 12 min @ 180°C

		CRS Iron phosphate + Passivation	CRS Zinc phosphate + Passivation	HDG Sweep blasting
1440 hours	Blistering (ISO 4628)	0	0	0
	Corrosion (ISO 4628)	Ri 0	Ri 0	Ri 0
	Average delamination (Scribe)	5,6 mm	0,6 mm	5,3 mm

Protection and expected performance will vary according to the design of the part to be painted, the quality of the surface pretreatment and implementation and thickness of the coating system, as well as the maintenance programme of the coated surfaces.

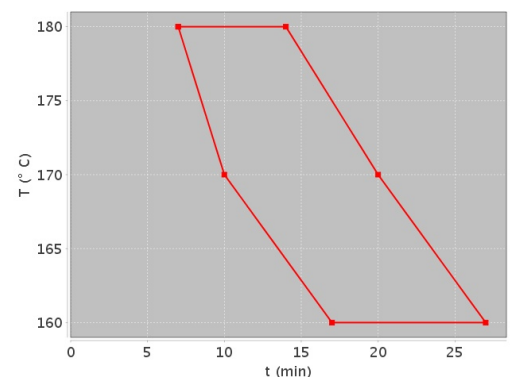


## Curing Conditions (object temperature)

Can be cured using a variety of methods, e.g. IR, convection, combi ovens. In direct gas ovens, combustion by-products may cause significant colour changes (for specific advice, please contact us).

Full cure:  
17-27 min @ 160°C  
10-20 min @ 170°C  
7-14 min @ 180°C

Partial cure:  
5 min @ 140°C



- For optimum intercoat adhesion, partial cure of the primer is recommended prior to application of the topcoat. This should be followed by full cure of the combined coating system according to the topcoat curing window.
- Product is formulated for optimum intercoat adhesion under industrial curing conditions. However, for non-conventional curing programme, above 210°C, long time in the oven or direct fired gas oven, it is advisable to test to confirm suitability.



## Storage Stability

36 months/35°C

Shelf life applies to materials stored in sealed plastic bags under dry and cool conditions.



## Substrate Preparation

- Both chemical and mechanical surface pretreatments are compatible with Alesta® Functional Prime.
- Surface pretreatment has to be defined depending on type of substrate and required performance.
- Substrate must be correctly prepared and dried before using EP90017275721 and surface should be free of all contamination such as rust, oxide scale, oil and grease, old paints etc.



## Application

- Do not mix this product with other powder coatings.
- Can be applied with manual or automatic guns.
- Alesta® Functional Prime is easily applicable, with high transfer efficiency.
- Film thickness: application settings will depend upon the geometry of the object being coated as well as the required film thickness. It is the responsibility of the applicator to make the appropriate adjustments. Optimum coating performance will be obtained with a film thickness of 50-80 µm.
- EP90017275721 is easily overcoatable with specified Alesta® topcoats without sanding or any other preparation\* (within 12 hours)  
\*Cleaning is necessary if primer surface becomes contaminated (dust, oil etc.)
- All other conditions must be checked before use with an adhesion test.
- Recycling of the powder: possible up to 30 %.



## Comments

- Certain chemicals or domestic cleaning products can cause damage to the appearance of the coating. Please test a small inconspicuous area first to confirm suitability
- Please contact us for specific questions.
- Coated parts should be packed after they are fully cooled using suitable materials that are free of plasticizers.
- Packaged parts should be stored under cover to avoid the formation of condensation (for example under plastic wrapping film) which could result in permanent marks on the surface of the coating.



## Safety

Consult the Safety Data Sheet prior to use

The information provided herein corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since Axalta cannot anticipate all variations in actual end-use conditions Axalta makes no warranties and assumes no liability in connection with any of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights.

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