

# Alesta® AP

## Polyester Architectural AQ QualiSteel

### AQ70027702120 RAL 7021 BLACK GREY

Polyester Architectural is a standard durability TGIC/PT91x free and lead free polyester powder coating, especially formulated for application galvanized and zinc thermal sprayed steel substrates. Polyester Architectural meets the requirements of the building industry due to its very good outdoor durability and mechanical properties.



#### Characteristics

- Semi Gloss Smooth
- Solid
- Corona
- Antigassing
- Low Bake

#### Colour Chart

- RAL 841-GL

#### Usage Area

- Lighting equipment and construction
- Industrial outdoor application e.g. agricultural machinery, garden furniture, fencing, electrical
- Railing
- Protection and decoration of interior parts



#### Approvals

Qualisteelcoat PE-0124, PE-0125, PE-0126



- 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) 12 min @ 170°C
- Substrate 2,5 mm Galvanized/Zinc Thermal sprayed Steel Panels
- Film thickness 70 ± 10 µm  
EN ISO 2360

#### Physical Data

- Density 1,47 g/cm³  
calculated



## Product Performance / Film Properties

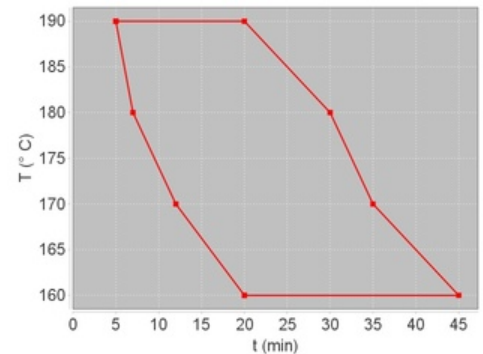
Gloss @ 60° EN ISO 2813	70 ± 10
Direct Impact Resistance EN ISO 6272	1 kg / 50 cm
Adhesion EN ISO 2409	GTO
Neutral Salt Spray 720 h EN ISO 9227	Zinc substrate: Corrosion ≤ 1mm, Delamination ≤ 8mm, Adhesion ≤ GT1, No blistering, no rusting
Humidity Chamber 480 h EN ISO 6270-2	No blistering, no rusting
Mortar Resistance EN 12206-1	No change (in accordance with Qualicoat requirements)
Weathering - Florida EN ISO 2810	1 year, Residual gloss ≥ 50%, Colour change ΔE: According to Qualisteelcoat requirements
Accelerated weathering - Xenon lamp EN ISO 16474-2	1000 hours, Residual gloss ≥ 50%, Colour change ΔE: According to Qualisteelcoat requirements



## 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).

20-45 min @ 160°C  
12-35 min @ 170°C  
7-30 min @ 180°C  
5-20 min @ 190°C



## Storage Stability

36 months/35°C  
Shelf life applies to materials stored in sealed plastic bags under dry and cool conditions.



## Substrate Preparation

- Corrosion resistance may be further enhanced by the use of our Alesta® ZeroZinc protective primers (please contact us for further information).
- The suitability of the surface preparation should be tested by the coater beforehand using appropriate test methods. Reference should be made to guidelines issued by Qualisteelcoat.
- On hot-dip galvanized steel: both chemical pre-treatment and mechanical surface preparation are compatible with AQ QualiSteel. On Zinc thermal sprayed steel, sanding might be required depending on surface roughness. Surface preparation should be chosen according to type of substrate and required performance.



## Application

- Do not mix this product with other powder coatings.
- Substrate should be correctly cleaned before use.
- Can be applied with manual or automatic guns.
- 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. Certain colours should be applied at higher film thickness to ensure full coverage and therefore colour homogeneity. Below this limit, colour variation may occur due to differences in film thickness.
- Great care is taken during our manufacturing process but small variations in colour and/or appearance are unavoidable with effect colours. Therefore we recommend that a single batch of powder coating should be used to coat parts that will be subsequently assembled together. Differences are more likely with effect powder coatings such as metallic, pearlescent, speckled, textured and combinations thereof. Differences will be more easily visible on large coated parts such as cladding panels, flat sheets etc.
- Recycling of the powder: possible up to 30 % for solid colours. For special finishes (for example metallic, pearlescent, speckled), please refer to our website and the 'Metallics are us - Tips for Users' guide.



## Comments

- Certain chemicals or domestic cleaning products may cause damage to the appearance of the coating. We recommend testing a small inconspicuous area first to confirm suitability.
- In instances where the coating will be subjected to additional processes (such as printing, labelling, overcoating, postforming, gluing, application of sealant or any other post-treatment), adequate testing should be performed to confirm suitability. Prototypes should be prepared under conditions that are representative of the final production process.
- 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.
- Please contact us for specific questions.



## 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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