



## Technical Data Sheet

# Teodur<sup>®</sup> AP Semi Gloss

The information given in this datasheet is generic for the **TEODUR<sup>®</sup> AP Semi Gloss** range. For specific products within the range, please consult us.

### Product Description

The **TEODUR<sup>®</sup> AP** range is a TGIC-free polyester powder coating, containing high performance carboxyl polyester resin.  
It has excellent weathering resistance.

### Products

#### TEODUR<sup>®</sup> AP Semi Gloss

Products exist in smooth finish and can be formulated in a wide range of appearances.

**Packaging:** 15 or 20 kg in plastic bag and cardboard box (depending on the specific gravity).

### Approvals

**Qualicoat :** P-0817 (Fr), P-0398 (UK), P-0615 (Ge), P-0767 (Sw)

**GSB :** 102o

This powder coating complies with the European Directives "Restriction of the use of certain hazardous substances" 2002/95/EC and 2011/65/EU (RoHS).

### Colours

Any colour available

-> Standard RAL colours: on stock

-> Others: on demand

Please contact us for further details.

### Substrates

In principle used on **outdoor architectural substrates:**

- > Aluminium profiles and sheets
- > Steel or galvanized steel for cladding
- > Verandas, doors, window frames

Can also be used for the protection and decoration of indoor equipment (please contact us for further information)

### Substrate Preparation

On aluminium, steel and galvanized steel: degreasing followed by a chemical conversion to attain the required level of anticorrosion protection.

On steel and hot-dipped galvanized steel it is possible to use our anticorrosion protective primers such as ALESTA<sup>®</sup> / TEODUR<sup>®</sup> ZeroZinc primer. (please contact us for further information)



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Physical Properties	
Specific Gravity	1,3 – 1,7
Particle Size distribution	100 % < 160 microns, can be tailored to suit specific application equipment

The following performances have been obtained under the conditions described below and in laboratory. Actual product properties such as gloss, colour and finish may vary according to condition of application.

Product Performance / Film Properties			
CONDITIONS			
Aluminium panels	5005 AA, 0.8 mm (AA6060 or AA6063 for acetic Salt Spray)		
Surface pretreatment	Chemical conversion		
Film Thickness	70 µm +/- 10		
Curing Conditions	10' @ 190°C (object temperature)		
TESTS	SPECIFICATIONS		SEMI GLOSS
	N°	DATES	
Thickness	EN ISO 2360	2003	60-80 microns
Gloss @ 60°	EN ISO 2813	1999	72 +/- 5
Adhesion	EN ISO 2409	2007	Class 0
Buchholz	EN ISO 2815	2003	≥ 80
Erichsen	EN ISO 1520	2006	≥ 5 mm
Cylindrical flexibility	EN ISO 1519	2002	≤ 5 mm
Kesternich (SO <sub>2</sub> )	EN ISO 3231	1997	24 cycles
Acetic salt spray	EN ISO 9227	1990	1000 hours
Impact resistance	EN ISO6272	2004	≥ 2.5 Nm
Resistance to boiling water			No defect or peeling after 2 hours
Constant Climate Condensation Water Test	EN ISO 6270-2	2005	1000 hours
Weathering (Florida) <b>Qualicoat</b>	ISO 2810	<b>1 Year</b>	
<b>GSB</b>		<b>Residual Gloss</b> : ≥ 50 % <b>Colour change</b> : Δ E : according to Qualicoat requirements (appendix A7) <b>Residual Gloss</b> : ≥ 50 % <b>Colour Change</b> ΔL*, ΔC* : according to GSB AL 631 section 9.19.1	
Accelerated weathering <b>Qualicoat</b>	EN ISO 11341	<b>1000 hours exposure Xenon Lamp</b>	
<b>GSB</b>	DIN EN ISO 11507	<b>Residual Gloss</b> : ≥ 50 % <b>Colour change</b> : Δ E : according to Qualicoat requirements (appendix A7) <b>300 hours exposure QUV-B</b> <b>Residual Gloss</b> : ≥ 50 %	

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### Baking Window

- **Advice and limits:**

-> Can be cured using a variety of methods, e.g. IR, convection, combi ovens.

-> In direct gas ovens, combustion byproducts may cause significant colour changes (for specific advice, please contact us)

### General curing conditions : TEODUR<sup>®</sup> AP Semi Gloss

- **Object t° / time**

200°C	8' – 15'
190°C	10' - 17'
180°C	15' – 25'

### Application

- Do not mix this product with another powder.
- Substrate should be correctly cleaned before use.
- Application using either manual or automatic electrostatic guns.
- The majority of our products can be applied using the TRIBO electric process. (please contact us for specific products)
- Film thickness: the required application settings will depend upon the geometry of the object being coated as well as the specified 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 happen due to thickness variation.
- Despite the great care that is taken during our manufacturing process, small colour or other slight appearance variations from batch to batch are unavoidable for effect colours. Therefore we recommend that a single batch of powder coatings 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 % with exception of some metallic and pearlescent products (please contact us for details).

### 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.
- For maintenance of material coated with TEODUR<sup>®</sup> AP powder coating, it is extremely important to follow our recommendations. (defined in the TEODUR<sup>®</sup> AP warranty document)
- Strict implementation of the correct maintenance procedure is needed to maintain the validity of the warranty and the decorative appearance of the coating.

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### Storage Stability

36 months @ 35°C

Shelflife applies to materials stored in sealed plastic bags under dry and cool conditions i.e. temperatures below 35°C.

### 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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