



|           |   |
|-----------|---|
| Group     | 214 – Polyester Bonded Metallic With Aluminium    |
| Curing    | min: 180°C @ 20' to 40'   max: 200°C @ 10' to 20' |
| Surface   | Smooth, metallic effect                           |
| Gloss     | N/A   |
| Approvals |   |

**PRODUCT DESCRIPTION**

A metallic effect TGIC-free thermosetting polyester powder coating featuring excellent resistance to UV radiation and outdoor weathering. The powder forms a protective and decorative film with enhanced outdoor resistance.

The PE/P Al range is designed to protect aluminium, steel and galvanised steel components in a variety of end uses. It's good exterior durability lends it to be used in both internal and external applications.

The metallic effect pigment is incorporated into the product by means of a bonding process for optimum application and reproducibility.

In high traffic areas a clearcoat can be applied to prolong the aesthetics of the coating.

**Storage Life:**

Store at temperatures lower than 30°C.  
Storage life in original package: 18 months.

**CHARACTERISTICS**

**Spec. Gravity (kg/l):** 1,25 – 1,65  
**DFT (micron):** 60 - 80  
**Theoretical Coverage @60um:** 11 m<sup>2</sup>/kg

**Recommended film thickness:**

Dry: 60 - 80 µm

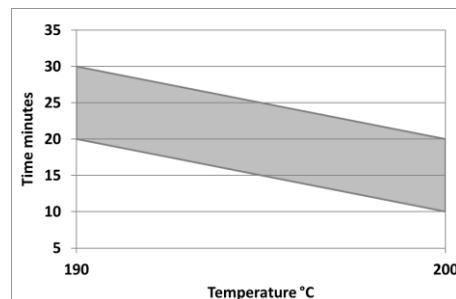
**APPLICATION**

Suitable for automatic and manual electrostatic application  
Please contact your Sherwin-Williams representative to discuss tribo-static application

**Curing Cycle**

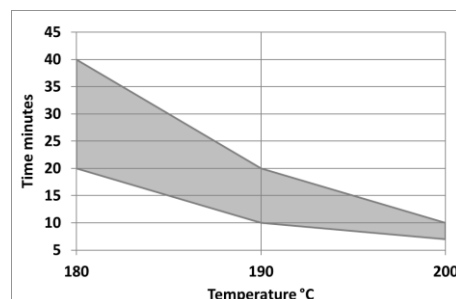
For stoving the Polyester metallic products with **gloss below 10:**

| Time        | Substrate temperature |
|-------------|-----------------------|
| 10 – 20 min | 200°C                 |
| 20 – 30 min | 190°C                 |



For stoving the Polyester matt products with **gloss over 10:**

| Time        | Substrate temperature |
|-------------|-----------------------|
| 7 – 10 min  | 200°C                 |
| 10 – 20 min | 190°C                 |
| 20 – 40 min | 180°C                 |

**SUBSTRATE PREPARATION**

The surface treatment should be chosen according to the type of substrate and the required performance.

The surface to be coated must be free from oxidation, oil, grease or any other form of contamination.

A good quality pretreatment process is recommended for optimum performance.

Final user should select the proper pretreatment based on corrosion resistance performance.

Where required, the corrosion resistance can be enhanced using a primer system.

|            |  | Substrate |       |                  |                  |       |
|------------|--|-----------|-------|------------------|------------------|-------|
|            |  | Aluminum  | Steel | Galvanized Steel | Metallized Steel | Steel |
| Chemical   | Cr-free (Zr, Ti, Oxilanes or alternatives) | ✓         |       | ✓                |                  |       |
|            | Pre-anodising                              | ✓         |       |                  |                  |       |
|            | Chromate                                   | ✓         |       | ✓                |                  |       |
|            | Phospho-chromate                           | ✓         |       |                  |                  |       |
|            | Iron phosphate                             |           | ✓     |                  |                  |       |
|            | Zinc phosphate                             |           | ✓     | ✓                |                  |       |
|            | Nano-ceramic                               |           | ✓     |                  |                  |       |
| Mechanical | Sand blasting                              |           | ✓     |                  |                  |       |
|            | Soft blasting                              |           |       | ✓                | ✓                |       |
|            | Sweeping                                   |           |       | ✓                | ✓                |       |

**PERFORMANCE DATA**

A pre-treated steel test panel (UNI sheet) with 60um of coating and cured 20 minutes at 180°C satisfied the following requirements:

**Buchholz indentation test :**

more than 90  
UNI EN ISO 2815

**Pendulum-rocker hardness :**

Persoz pendulum  
more than 300  
UNI EN ISO 1522

**Erichsen cupping test (mm):**

more than 5  
UNI EN ISO 1520

**Direct impact test (cm.Kg):**

more than 25  
ASTM D 2794; ISO 6272-2:2002

**Reverse impact test (cm.kg):**

more than 25  
ASTM D 2794; ISO 6272-2:2002

**Conical mandrel : Bend test**

Maximum 10 mm  
UNI EN ISO 6860

**Crosscut adhesion (2mm) (GT):**

Class 0  
UNI EN ISO 2409

**Salt fog test :**

1000 hours  
Scribe creep 3-6 mm  
UNI ISO 9227

**Resistance to humidity:**

(Humidity test) 500 hours  
no change  
UNI EN ISO 6270-2:2005

**CAUTION****FOR INDUSTRIAL SHOP APPLICATION**

Thoroughly review product label and Safety Data Sheet (SDS) prior to using this product.

A Safety Data Sheet is available from your local Sherwin-Williams facility or distributor

**Note:** Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the user obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in user handling and methods of application which are not known or under our control, The Sherwin-Williams Company cannot make any warranties as to the end result.