

Group	216 – Polyester Metallic Al (with Aluminium)
Curing	min: 180°C @ 20 to 40'   max: 200°C @ 10' to 20'
Surface	Bright metallic appearance
Gloss	N/A
Approvals	

## PRODUCT DESCRIPTION

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

It has good resistance to yellowing caused by the chain stop during stoving.

It is suitable for a wide range of interior and exterior applications including signage, point of sale, garden furniture, racking and shelving, metal office furniture, fencing.

Attractive metallic appearance adds value to components.

To maintain the aesthetics in high traffic or aggressive environments, it is recommended to apply a clearcoat.

### 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

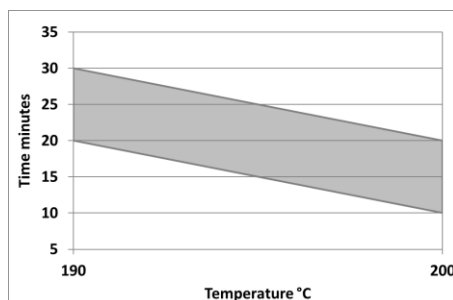
## APPLICATION

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

### Curing Cycle

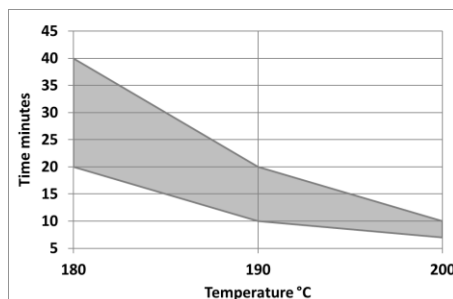
For stoving the Polyester metallic products with **gloss below 10:**

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



To maintain a consistent color/effect it is important for the coater to control the ratio of virgin to reclaim Powder. A minimum 70% virgin powder is recommended.

## 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			✓	✓	

## CHEMICAL RESISTANCE

Immersion method for 48 hours at ambient temperature into:

<u>CHEMICAL</u>	<u>RESULT</u>
Hydrogen chloride 10%	intact
Nitric acid 30%	intact, but washing off
Saturated hydrogen sulphide	intact
Hydrogen peroxide 40 volumes	intact
Ammonium hydroxide 10%	intact
Ammonium hydroxide 33%	intact
Sodium hydroxide 5%	intact
Tartaric acid 5%	intact
Citric acid 5%	intact
Lactic acid 5%	intact
Ethanol	intact
N-butanol	intact
Petroleum ether	slightly softened

## PERFORMANCE DATA

A 60um coating applied to a zinc phosphated steel test panel (UNI sheet) 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 spray test :**

1000 hours  
Scribe Corrosion 3-6 mm  
UNI ISO 9227

## 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.