



|            |  |
|------------|--|
| Group      | 227 – Polyester Low Bake Metallic Mic. (without Aluminium) |
| Curing     | min: 160°C @ 20' to 40'   max: 190°C @ 6 to 11'            |
| Surface    | Smooth, metallic appearance                                |
| Brilliance | N/A  |
| Approvals  |  |

**PRODUCT DESCRIPTION**

A low bake, metallic finish 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.

Suitable for a wide range of industrial applications, particularly suited to heavy fabrications due to the reduced curing temperature.

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:**

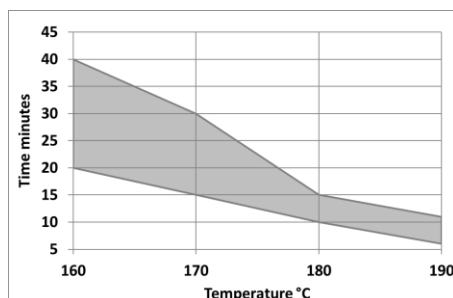
Dry: 60 - 80 µm

**APPLICATION**

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

**Curing Cycle**

| Time        | Substrate temperature |
|-------------|-----------------------|
| 6 – 11 min  | 190°C                 |
| 10 - 15 min | 180°C                 |
| 15 - 30 min | 170°C                 |
| 20 - 40 min | 160°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 |  |
| 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 zinc phosphated steel test panel (UNI sheet) with 60 microns coating cured 20 minutes at 160°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 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.