

**POLITHERM 96 WFQ R ME- GRAY ARDO W RAL 9023 MA****Code:** 15593925**PRODUCT DESCRIPTION**

QUALICOAT-approved polyester powder coating, offering excellent adhesion and flexibility, as well as good chemical and yellowing resistance. It has high physical resistance and excellent weathering resistance.

**RECOMMENDED USE**

QUALICOAT-approved coating for metal parts intended for industrial and architectural applications in outdoor environments.

**PROPERTIES**

Metallic coatings are sensitive to scratches and exhibit variable wear, depending on the usage of the parts. The metallic appearance may change in situations such as heavy handling, contact with chemicals (including some cleaning products), friction between parts or with abrasive objects. To protect the film from wear, we recommend the application of a uniform layer of glossy polyester powder varnish. Note that this procedure diminishes the metallic effect to a varying degree, depending on the level of metallization of the paint. For non-glossy finishes, it is recommended to previously test the use of varnishes with lower gloss. It is recommended to test the use of varnishes beforehand, and the varnish should be applied after the metallic paint has partially cured.

This coating, when properly applied and cured is suitable for the use of adhesives and sealants. However, because of the different products on the market, it requires prior testing by the user in order to select the adhesive and / or sealant appropriate.

**CERTIFICATIONS AND APPROVALS**

Free from heavy metals and other substances provided for in RoHs Directive 2015/863 EU of 31/03/2015.

The Politherm 96 WFQ line is QUALICOAT APPROVAL N° P-1717 Class 1, Category 1 certified and complies with AAMA 2603 standard.

**PACKAGING**

Cardboard box with 15 kg in high-density polyethylene bag.

**CHARACTERISTICS OF MANUFACTURED PRODUCT**

|                                                 |                                                                                                                        |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Resin</b>                                    | Polyester                                                                                                              |
| <b>Gloss</b>                                    | Matte                                                                                                                  |
| <b>Finish</b>                                   | Metallic                                                                                                               |
| <b>Specific gravity (<math>\pm 0,10</math>)</b> | 1,24 g/cm <sup>3</sup>                                                                                                 |
| <b>Theoretical Coverage</b>                     | 11,52 m <sup>2</sup> /kg in medium thickness 70 $\mu$ m                                                                |
| <b>Mass loss during cure</b>                    | Maximum 2%                                                                                                             |
| <b>Moisture content</b>                         | Maximum 0.6%                                                                                                           |
| <b>Shelf life</b>                               | 12 months                                                                                                              |
| <b>Storage condition</b>                        | It must be stored in closed containers, in cool, dry and covered places, at an ambient temperature not exceeding 30°C. |

**APPLICATION CHARACTERISTICS**

|                            |                                                                                                                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Substrate</b>           | Ferrous metals<br>Non-ferrous metals                                                                                                                                                   |
| <b>Surface preparation</b> | Aluminum: Chromatization.<br>Aluminum: Nanoceramic<br>Galvanized steel: Phosphatization.                                                                                               |
| <b>Surface cleaning</b>    | The performance of this product is related to the degree of surface preparation. The surface must be clean, dry and free of any contaminants. Completely remove oils, grease and fats. |



|                           |                                                        |
|---------------------------|--------------------------------------------------------|
| <b>Thickness</b>          | 60 µm - 80 µm                                          |
| <b>Cure conditions</b>    | 10 min à 200 °C (metal temperature).                   |
| <b>Cure windows</b>       | 12 min - 20 min at 190 °C<br>10 min - 25 min at 200 °C |
| <b>Application system</b> | Electrostatic spray gun corona                         |

## CHARACTERISTICS OF APPLIED PRODUCT

| Test                                     | Specification/Standard                  |
|------------------------------------------|-----------------------------------------|
| <b>Adhesion</b>                          | Maximum GR0 (ASTM D3359)                |
| <b>Gloss 60°</b>                         | Visual standard                         |
| <b>Impact</b>                            | Minimum 50 kg.cm (ASTM D2794)           |
| <b>Flexibility (conic mandrel)</b>       | Maximum 3,00 mm (ASTM D790)             |
| <b>Cupping test</b>                      | Minimum 5,0 mm (EN ISO 1520)            |
| <b>Indentation</b>                       | Minimum 80 (EN ISO 2815)                |
| <b>Bend test (5mm diameter cilinder)</b> | No cracking or detachment (EN ISO 1519) |

## CHEMICAL RESISTANCE CHARACTERISTICS

| Test                     | Specification/Standard     |
|--------------------------|----------------------------|
| <b>Humidity</b>          | Minimum 2000h (ASTM D2247) |
| <b>Acetic salt spray</b> | Minimum 1000h (ISO 9227)   |
| <b>Salt spray</b>        | Minimum 1000h (ASTM B117)  |

### NOTE:

Chemical resistance and mechanical strength tests were performed on aluminum sheets pretreated with zirconium nanoceramic under curing conditions and coatings specific to the product. Values may vary depending on the substrate and pretreatment used.

## SAFETY PRECAUTIONS

Guidance is available in the product's Safety Data Sheet (SDS).

### NOTE

The information provided herein is based on our testing and experience and is intended to inform you about the product and its possible applications. The information provided in this bulletin is not intended to be complete, and the user assumes the risk of using the product for a purpose other than the specifications recommended in this bulletin without first obtaining our written confirmation of its suitability for the intended purpose. While we strive to ensure the accuracy of the information provided herein, we cannot control the quality or condition of the substrate, nor any other factors that affect the use and application of this paint. Therefore, unless we agree in writing to any condition that deviates from our recommendations, we accept no liability that may arise regarding the performance of this product. The information contained in this bulletin is subject to change without notice, based on our experience and policy of continuous development.