

POLITHERM 29 TF R MT- METALLIC BLACK 70289 UM**Code:** 18083382**PRODUCT DESCRIPTION**

TGIC-free polyester powder coating with good adhesion, flexibility and chemical resistance. It has high physical resistance and good weathering resistance.

RECOMMENDED USE

Coating of metal parts for industrial purposes 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.

Due to the technical characteristics of this product, properties such as gloss, roughness and texture may vary depending on the applied film thickness and application conditions, such as voltage, flow rate, spray gun distance and grounding.

CERTIFICATIONS AND APPROVALS

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

PACKAGING

Cardboard box with 55 lb in high-density polyethylene bag.

CHARACTERISTICS OF MANUFACTURED PRODUCT

Resin	Polyester
Gloss	Ultra matte
Finish	Microtexture
Specific gravity (± 0,10)	1,62 g/cm³
Theoretical Coverage	120.5 ft²/lb at 1.0 mil
Mass loss during cure	Maximum 2%
Moisture content	Maximum 0.6%
Shelf life	12 months
Storage condition	It must be stored in closed containers, in cool, dry and covered places, at an ambient temperature not exceeding 86°F.

APPLICATION CHARACTERISTICS

Substrate	Ferrous metals Non-ferrous metals
Surface preparation	Ferrous : Phosphatization Non-ferrous: Chromatization or phosphatization
Surface cleaning	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.
Thickness	2.8 mils - 3.5 mils
Cure conditions	10 min à 356 °F (metal temperature).
Cure windows	15 min - 25 min at 338 °F



10 min - 20 min at 356 °F
7 min - 15 min at 374 °F
5 min - 12 min at 392 °F

NOTE: **Application system** Electrostatic spray gun corona
For non-ferrous metals phosphatizing, please contact our technical service.

CHARACTERISTICS OF APPLIED PRODUCT	
Test	Specification/Standard
Adhesion	Maximum GR0 (ASTM D3359)
Gloss	Visual standard
Impact	Minimum 43 lb.in (ASTM D2794)
Flexibility (conic mandrel)	Maximum 1/8 in (ASTM D790)

CHEMICAL RESISTANCE CHARACTERISTICS	
Test	Specification/Standard
Humidity	Minimum 1500h (ASTM D2247)
Salt spray	Minimum 700h (ASTM B117)

NOTE: In the chemical resistance tests, the substrate used was cold-rolled steel sheet with tricationic phosphate. The mechanical resistance tests were performed on degreased common steel sheet under specific curing and coating conditions for the product. The values ##may vary depending on the substrate 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.