



POLITHERM 21 R SM BLACK 70590 UM

Code: 10005539

PRODUCT DESCRIPTION

Hybrid powder coating with good adhesion and flexibility, high physical resistance and good chemical resistance.

RECOMMENDED USE

Coating of metal parts for use in indoor or sheltered environments.

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 25 kg in high-density polyethylene bag.

CHARACTERISTICS OF MANUFACTURED PRODUCT

Resin	Epoxy/Polyester
Gloss	Ultra matte
Finish	Smooth
Specific gravity (± 0,10)	1,63 g/cm³
Theoretical Coverage	10,22 m²/kg in medium thickness 60 µm
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 30°C.

APPLICATION CHARACTERISTICS

Substrate	Ferrous metals Non-ferrous metals
Surface preparation	Ferrous : Phosphatization or nanoceramic Non-ferrous: Chromatization or nanoceramic
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	50 µm - 70 µm
Cure conditions	10 min à 200 °C (metal temperature).
Cure windows	15 min - 25 min at 180 °C 12 min - 20 min at 190 °C 10 min - 18 min at 200 °C 8 min - 15 min at 210 °C
Application system	Electrostatic spray gun corona

NOTE:

For non-ferrous metals phosphatizing, please contact our technical service.

CHARACTERISTICS OF APPLIED PRODUCT

Test	Specification/Standard
Adhesion	Maximum GR0 (ASTM D3359)
Gloss 60°	5 - 11 (ASTM D523)



Impact	Minimum 50 kg.cm (ASTM D2794)
Flexibility (conic mandrel)	Maximum 3,00 mm (ASTM D790)

CHEMICAL RESISTANCE CHARACTERISTICS

Test	Specification/Standard
Humidity	Minimum 2000h (ASTM D2247)
Salt spray	Minimum 1800h (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.