TECHNICAL DATA SHEET

POLITHERM 86 WFS R SM WHITE CATERPILLAR 60291 SB

Code: 15509712

PRODUCT DESCRIPTION

Superdurable polyester powder coating with good chemical resistance and excellent adhesion, flexibility and yellowing resistance. It has excellent weathering resistance with greater gloss and color retention than other polyester-based coatings.

RECOMMENDED USE

Coating of metal surfaces for use outdoors where extra durability against the weather effects is required.

PROPERTIES

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.

Certified coating acording to UL 1332 license MH63984.

Caterpillar approved product, standard 1E4602 CHG No. 01:2024.

PACKAGING

Cardboard box with 25 kg in high-density polyethylene bag.

CHARACTERISTICS OF MANUFACTURED PRODUCT

Resin	Polyester
Gloss	Semi bright
Finish	Smooth
Specific gravity (± 0,10)	1,59 g/cm³
Theoretical Coverage	7,86 m²/kg in medium thickness 80 µm
Mass loss during cure	Maximum 2%
Moisture content	Maximum 0,6%
Shelf life	6 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
Surface preparation	Ferrous : Phosphatization 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	70 µm - 90 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 - 12 min at 210 °C
Application system	Electrostatic spray gun corona

CHARACTERISTICS OF APPLIED PRODUCT

Reviewed on February 17th, 2026

Test	Specification/Standard
Adhesion	Maximum GR0 (ASTM D3359)
Gloss 60º	72 - 82 (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 1200h (ASTM B117)

NOTE:

The tests for UL certification were conducted on cold-rolled steel substrate sheets with zinc phosphate treatments.

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.

Reviewed on February 17th, 2026