



# Powder Coating Data Sheet

## FEATURES

- Excellent for cleanroom applications
- Good weather resistance
- Good mechanical properties
- Good chemical resistance
- Excellent UV protection
- Good storage stability
- Underwriter Laboratories recognized component (UL approved)



Underwriters Laboratories Inc,  
(UL) Recognition

PRODUCT DETAILS	
Type	Polyester TGIC Powder Coating
Specific gravity (ASTM D792)	Approximately 1.2-1.8 g/cm <sup>3</sup> depending on pigmentation
Theoretical coverage	At 2.5 mils (60 µm) film thickness: 51.5 ft <sup>2</sup> /lb (11.1 m <sup>2</sup> /kg). Refer also to "Theoretic Powder Coating Coverage Chart" version 00-1001 (imperial) version 00-1000 (metric)

FINISH	GLOSS
Smooth Glossy	80-95+*
* Gloss level according to ASTM 523 at 60° angle. The measured gloss level of effect powder coatings can diverge from the details given in this Product Data Sheet. The creation of tolerance samples is recommended.	

TEST METHOD	TEST	VALUE
ISO 2360	Film Thickness	2.5-3.5 mils (60-80 µm)
ASTM D523	Gloss - 60°	80-95+
ASTM D3359 <i>method B</i>	Cross cut tape test <i>1mm cutting distance</i>	5B
ASTM D522	Mandrel Bending Test <i>cracking of coating</i>	≤1/8 inch (≤3 mm)
ASTM D2794	Ball Impact Test <i>cracking of coating</i>	80 in/lb
ASTM D3363	Pencil Hardness	2H minimum
ASTM D2247	Determination of resistance to humidity <i>1,000 hours</i>	Maximum undercutting 1/8 inch (3mm), no blistering
ASTM B117	Salt Spray Resistance <i>1,000 hours</i>	Maximum undercutting 1/8 inch (3mm), no blistering

## PLEASE NOTE

Post-bending properties of any part must be verified prior to application. Minor cracks in the coated surface may lead to corrosion. Joint sealants and any other auxiliary products, such as glazing aids, gliding waxes, drilling and cutting lubricants, which come in contact with the coated surface, must be pH-neutral and free of substances that may damage the finish. Therefore, a suitability test at the applicator's end, prior to coating, is highly recommended. Please read and understand the Safety Data Sheet (SDS) before use.

## CHEMICAL RESISTANCE

The required chemical resistance of a powder coating depends, among other things, on its formulation. Chemical resistance requirements must be considered according to processing conditions and final use of the finished product. This is best established during the product specification process. Agreement between all parties involved must be reached about the requirements for such chemical resistance as well as the test method, which may be performed in accordance with PCI test method #8 "Solvent Cure Test". Furthermore, the test duration and concentration of the test media need to be agreed upon.

## CLEANING RECOMMENDATIONS FOR POWDER COATED METAL COMPONENTS

A thorough cleaning of coated components is required to conserve the façade decorative appearance and to reduce the corrosion strain.

Powder coated surfaces proper maintenance and regular servicing are prerequisites for claims related to any guarantee and require regular cleaning at least once per year. Buildings must be cleaned more often when they are located in severe polluted environments such as; a region with increased salt contamination and/or chemical exhausts, a direct area of influence or within the vicinity of an industrial or chemical enterprise, the immediate vicinity of a sea coast or within a defined chemical/radioactive precipitation zone. An early detection of a possible damage can allow timely recognition and can be remedied on time by suitable measures.

When a coated component is soiled during transportation, storage or assembly, cleaning the component must take place immediately with clear cold or lukewarm water. A neutral or weak alkaline detergent can be used against severe soiling.

### CLEANING GUIDELINES

- As the case may be, use only clean water with slight additives of neutral washing agents (pH 5-8) with the aid of non-abrasive soft cloths, rags or industrial cotton. Strong rubbing is to be avoided
- The removal of greasy, oily or sooty substances can take place with the use of white spirit free of aromatic compounds or isopropyl alcohol (IPA). Adhesives, silicone cartouche, adhesive tapes or other residues can also be removed this way
- Do not use solvents or similar diluents containing ester, ketones, alcohol, aromatics, ethylene glycol or halogenated hydrocarbon
- Joint sealants and other aids such as glazing aids, lubricant agents, drilling and cutting lubricants which come into contact with coated surfaces, must be pH-neutral and free of paint-damaging substances. They must be first subjected to a suitability test
- Due to the danger of changes in a color tone or effect, a test for suitability is to be undertaken for metallic powder coatings
- Do not use scratching or abrasive agents
- Do not use strong acids, alkaline detergents or introfiers
- Do not use detergents of unknown composition
- Detergents must not be used at temperatures higher than 77 °F (25 °C)
- Do not use steam-jet devices
- During cleaning, the façade components surface temperature must not exceed 77 °F (25 °C)
- The maximum exposure period of detergents must not exceed one hour. When necessary, the entire cleaning process can be repeated at least after 24 hours
- Rinsing with clean cold water should take place immediately after every cleaning process

Further Information for maintenance and cleaning can be obtained, among others, from the American Architectural Manufacturer's Association (AAMA 610-1979 Cleaning Procedures).

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