Product Data Sheet

AkzoNobel Powder Coatings

Super-Durable Powder Coating
Interpon® ACE 2000

Product Description

Interpon® ACE 2000 is a series of super-durable polyester TGIC powder coatings designed for exterior exposure and for use as a decorative and/or functional coating for agricultural and construction equipment and components. Tested against the most severe specifications, Interpon® ACE 2000 coatings provide significantly improved gloss retention and resistance to color change.

Powder Properties

Particle size	Suitable for electrostatic spray
Chemical type	Polyester TGIC
High Gloss (60°)	≥ 80%
Satin Gloss (60°)	≥ 40% to ≤ 70%
Orange Peel	6 min (ACT ref. Panels)
Density	1.2 – 1.8 g/cm^3 Depending on Color
Storage	Dry cool conditions (<80°F, <25°C)
Shelf life	12 months, typical
Cure Schedule (object temperature)	15-30 minutes at 350°F (180°C) 10-25 minutes at 375°F (190°C) 8-20 minutes at 390°F (200°C)

Failure to observe the correct curing conditions may cause difference in color, gloss and the deterioration of the coating properties.

Test Conditions

The results shown below are based on mechanical and chemical tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for guidance only. Actual product performance will depend upon the circumstances under which the product is used.

Substrate	Cold Rolled Steel
Pretreatment	Iron Phosphate (B1000) or Zinc Phosphate (B952)
Film Thickness	60-90 µm
Cure Schedule	20 minutes at 305°F (180°C) (object temperature)

Mechanical Tests

	Method	Result
Adhesion	ASTM D3359	5B
Hardness	ASTM-D3363 (Gouge)	≥ H
Impact Resistance	ASTMD2794	≥ 40 Direct / ≥ 20 Reverse (in*lb)
Elongation - Conical Mandrel	ASTM D522	≤ 3 mm

Chemical and Durability Tests

Salt Spray	ASTM B117	DTM: 240 hours min Average Creepback after Scraping: < 3.0 mm
Cyclical Corrosion	SAE J2334	DTM: 20 cycles/ 40 cycles if over Ace Primer Average Creepback after scraping: < 5.0 mm
Florida Exposure (12 mo.)	ASTM D1014	Gloss Retention (60°): ≥65% Color Change (ΔE): <4 max
Humidity Resistance	ASTM D2247	No rust, no blisters, no gloss reduction after 1000 hours

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Chemical Resistance	ASTM D870	Good immersion resistance to water, diesel fuel, engine oil, gasoline, and engine coolant.
Stability at Elevated temperatures		No significant change in color or gloss after 100% overbake.

Pre-treatment

Aluminum, steel or Zinc surfaces to be coated must be clean and free from grease. Iron phosphate and particularly lightweight zinc phosphating of ferrous metals improves corrosion resistance.
Aluminum substrates may require a chromate or non-chromate conversion coating.

Application

Interpon® ACE 2000 powders can be applied by manual or automatic electrostatic spray equipment. It is recommended that for consistent application and appearance the product be fluidized during application. Unused powder can be reclaimed using suitable equipment and recycled through the coating system. For more detailed information please contact AKZO NOBEL technical service people.

Additional Information

Interpon® ACE 2000 super durability powder is an economical and environment friendly coating. Comparing to common outdoor use powder coating, it provides better anti-corrosion performance, color stability and gloss retention after exposure. In serious application environment, a primer is necessary. However, performance is still influenced by substrate & pretreatment type and film thickness uniformity.

Safety Precautions

This product is intended for use only by professional applicators in industrial environments and should not be used without reference to the relevant health and safety data sheet which AkzoNobel has provided to its customer. If for any reason a copy of the relevant health and safety data sheet is not immediately available the user should contact AkzoNobel to obtain a copy before using the product. When using, do not eat, drink or smoke. All dusts are respiratory irritants. Therefore, inhalation of the dust or of the vapors resulting from the cure should be avoided. Take steps to prevent skin contact, but should contact occur, wash skin with soap and water. In case of eye contact flush immediately with clean water and seek medical advice. Dust clouds of any finely divided organic material can be ignited with an electric spark or open flame. Dust and powder should not be allowed to build up on surfaces or ledges. Dust collection equipment should be used which has provision for adequate explosion release. All equipment should be electrically earthed to prevent build up of static.

Disclaimer

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