

Product Data Sheet

AkzoNobel Powder Coatings

Interpon 200 Cr UW0094 - Chrome Silver

Product Description **Interpon 200 Cr** is a series of polyurethane-based powder coatings designed for the exterior environment offering excellent corrosion resistance and flexibility properties. Exceptionally smooth flow and high gloss make **Interpon 200 Cr** powders ideal for applications where a high level of aesthetic finish is required.

Please note that **Interpon 200 Cr** are not designed for architectural applications. To prevent oxidation of the basecoat, a clear coat must always be applied.

Powder Properties	Chemical type	Polyurethane
	Recommended Film Thickness (µm)	70 – 90
	Density (g/cm³)	1.20-1.50 g/cm ³ (Please consult CoA of product)
	Application	Electrostatic
	Storage	Dry cool conditions below 30°C (open boxes must be resealed)
	Shelf life	24 months
	Curing schedule	15-20 minutes at 190°C 10-15 minutes at 200°C

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.

The test results are shown below based on a single layer application of UW0094 without application of a clearcoat.

Substrate	Gold Seal polished steel
Pretreatment	Gold Seal lightweight Zinc Phosphate
Film Thickness	70-90 microns
Cure Schedule (object temperature)	10 minutes at 200°C

Mechanical Tests	Flexibility	ISO 6860 (Conical Mandrel)	Pass 5 mm
	Adhesion	ISO 2409 (2mm crosshatch)	0
	Erichsen Cupping	ISO 1520	≥ 9 mm
	Hardness	ISO 1518 (2000g)	Pass - no penetration to substrate
	Impact (direct/indirect)	ISO 6272	≥ 90 kg·cm

Chemical & Durability Tests

The results shown are based on tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for advice only, actual performance depends upon the circumstances under which the product is used.

The chrome basecoat should be protected by a powder or liquid clearcoat before chemical performance tests.

The test results are shown below based on a UW0094 and clearcoat.

Neutral Salt Spray	ISO 9227 (250 hours)	Pass - no corrosion creep more than 2mm from scribe
Cyclic Humidity	ISO 6270-1 (1000 hours)	Pass - no blistering or loss of gloss
Distilled Water Immersion	ISO 2812 (240 hours)	Pass - no blistering or loss of gloss
Exterior Durability	Suitable for outdoor exposure as dual system with clearcoat	
Chemical Resistance	Generally excellent resistance to most acids, alkalis and oils at normal temperatures.	

Pretreatment

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

Application

Interpon 200 Cr powders can be applied by manual or automatic electrostatic spray equipment. Unused powder can be reclaimed using suitable equipment and recycled through the coating system.

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- Flat jet spray nozzles
- Voltage: around 50-70 kV
- Current 80mA
- Main Air Pressure 0.7 Bar
- Slow first passes
- A soft powder cloud should be used
- Distance gun-part: 20 to 25 cm
- Dilution Air Pressure 0.7 Bar

To ensure powder homogeneity the powder should only be fed from a fluid bed feed hopper. Direct feed from the powder box is not recommended.

To maintain the bright metallic appearance the powder should not be recycled.

Ensure the coating is fully cured before application of the clear topcoat. Failure to fully cure the basecoat can result in disruption of the clearcoat surface at the coating-coating interface after application and curing of the clear coat. This will lead to a reduction in the gloss of the final coating and a reduced metallic effect. This can also lead to discoloration of the clear coat.

Additional Information

Some polyurethane powders release a small amount (1.5%) of ϵ -caprolactam on stoving. Care should be taken to ensure that working concentrations of caprolactam are kept below 25mg/m³. Interpon 200 powders are available in bright Aluminium finishes which are susceptible to scratching and finger marking. Protection by use of a clear polyester top coat is recommended when the coated article is to be subjected to physical damage or environmental damage.

The top coat should ideally be applied within 2 hours of the metallic coating and gloves should be worn when handling the metallic coated articles. For further details on the use of metallic powder coatings please contact AkzoNobel.

Special effects guide

Special effect powders are products requiring some special procedures and techniques in comparison with solid shades, particularly in application. To ensure that end user is satisfied they need special attention, both in the powder coatings production factory and on the premises where they are being applied.

Metallic finished are by nature more sensitive to variations in appearance than solid shades. When the product is to be applied on a mass production basis, manufactures should put special procedures in place to ensure the best possible repeatability.

When it comes to application, it is advisable to comply with some basic rules like:

- Produce presentation (“visual reference”) panels before executing the whole order
- Submit a coated panel to the customer for approval
- Supply a project wherever possible in one single campaign all with the same batch of powder
- Discharge small cartons of powder into hoppers to make the powder more homogeneous
- Avoiding moving spray guns in a figure of eight motions when applying manually

Experience dictates that with many special effect powder finishes they may be a strong dependence on the application equipment. A basic rule to try and get accepted by all interested parties on a contract is that more color variation is likely to occur than for traditional solid shade finishes.

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 Akzo Nobel has provided to its customers.

Disclaimer

IMPORTANT NOTE: The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product.

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