

# **Product Data Sheet**

**AkzoNobel Powder Coatings** 

Interpon 700 EW041D Chrome Silver 2

#### **Product Description**

Interpon 700 Chrome Silver 2 EW041D is a bright metallic powder with a chrome effect finish. EW041D is designed for the interior decoration of all items which require an excellent chrome effect finish such as metal furniture, shop fittings, shelves and light fittings.

Interpon 700 Chrome Silver 2 EW041D is an epoxy-polyester resin based thermo-setting powder coating.

Interpon 700 Chrome Silver 2 EW041D, when applied as a single coat, is only intended for interior use. For more aggressive interior environments or any exterior uses EW041D should be applied as part of a system and over-coated with the polyester clear coat Interpon 810 YZ500D

#### **Powder Properties**

Chemical type	Epoxy-Polyester	
Appearance	Chrome effect metallic	
Particle Size	Suitable for electrostatic spray	
Specific gravity	1.20 g/cm <sup>3</sup>	
Storage	Dry cool conditions below 25°C (open boxes must be resealed)	
Stoving schedule	As a single coat	
(object temperature)	15 – 30 minutes at 180°C	
	10 – 25 minutes at 190°C	
	6 – 20 minutes at 200°C	
	As a 2 layer system	
	10 – 15 minutes at 180°C	
	8 – 12 minutes at 190°C	

Failure to observe the correct curing conditions may cause difference in colour, gloss and the deterioration of the coating properties. Over curing can cause adhesion problems of the second layer. To ensure the best inter-coat adhesion and the best chrome effect, the ideal curing conditions of Chrome Silver 2 System (EW041D Chrome Silver 2 + Interpon 810 clear YZ500D) is 10-15 min at 180°C or 8-12 min at 190°C for both Layers.

#### **Test Conditions**

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.

Substrate	0.5mm steel panels	
Pretreatment	Iron phosphate	
Application method	Electrostatic Spray	
EW041D Thickness	80 ± 5 microns	
EW041D Curing	<b>D Curing</b> 15 minutes at 180°C (as primer for complete system)	
Topcoat	t YZ500D (for 2 layer system)	
Topcoat Thickness	$80 \pm 5$ microns	
Topcoat Curing	15 minutes at 180°C	

#### **Mechanical Tests**

Adhesion	ISO2409 (2mm crosshatch)	GT0 (EW041D) GT0 (system)
Erichsen Cupping	ISO1520	Pass 6mm (EW041D) Pass 3mm (system)
Flexibility	ISO1519	Pass 6mm (EW041D) Pass 6mm (system)



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#### **Chemical tests**

		EW041D single coat	2 coat System
Salt Spray (240 hours)	ISO 9227	No corrosion creep >2mm from scribe.	No corrosion creep >2mm from scribe.
		Class 0 Loss of Chrome effect	Class 0  No change of visual appearance
Humidity (240 hours)	ISO 6270-2	No blistering or loss of Chrome effect	No change of visual appearance
Florida Natural Weathering		Interior use only	>50% gloss retention after 12 months

#### **Pre-treatment**

Aluminium, steel or Zintec surfaces must be clean and free from grease. Iron phosphate and lightweight zinc phosphating of ferrous metals improves corrosion resistance. Aluminium surfaces may require a suitable chromate conversion, chrome free pre-treatment or flash anodising for certain applications. Galvanised steel may require zinc or chromate conversion or sweep blasting. Detailed advice should be sought from the pre-treatment supplier.

#### **Application**

EW041D can be applied only by corona electrostatic equipment. It is not possible to apply EW041D with Triboguns. In all application processes the aspect obtained is subject to variation, depending on the method of application (type of gun, nozzle, pot etc) and the shape/type of component.

We recommend that the actual application parameters are adapted and adjusted depending on the type of component and with each powder batch in order to give a finish in accordance with our agreed colour reference. We recommend:

- flat jet spray nozzles
- voltage: around 100 kV
- distance gun part: 20 to 25 cm
- slow first passes
- a soft powder cloud should be used
- film thickness 90 110 microns

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.

EW041D has good finger print resistance but we recommend the use of clean and lint-free gloves for handling particularly in the case of over coating.

#### Recycling

Possible up to 30% of reclaimed powder.

#### Overcoating

If a second coat of clear coat is being applied this should be done as soon as possible. The surface of the first coat should be kept clean, dry and grease free. Care should be taken to avoid over curing of the first coat. Curing EW041D with higher temperatures or longer times might lead to adhesion problems and has to be tested on the customer's line conditions.

- Interpon 810 Clear coat (high durability) YZ500D film thickness of 80 100 microns
- Acrylic clear coat e. g. Interpon 410 CZ001D film thickness 80 100 microns
- Standard Polyester clear coat Interpon 610 MZ610D; film thickness 80 100 microns

## Additional Information

#### **Contact with Chemical Agents**

Contact, even of a short duration with certain household products and chemicals, can cause irreversible changes in the gloss and appearance. We recommend that a test is carried out on a non-visible area before using these types of products on these coatings.

#### **Exposure to aggressive Environments**

Due to the high level of metallic particles some finishes are sensitive to aggressive environments (i.e. humid, or areas in which wear by rubbing occurs). For protection over-coating with a clear coat such as YZ500D is recommended.

For further information please contact AkzoNobel.

#### **Safety Precautions**

Please consult the Material Safety Datasheet (MSDS)



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#### 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 fulfill 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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