

Product Datasheet



AkzoNobel
Tomorrow's Answers Today

BU Powder Coatings Chrome Silver 2 EW041D

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. The product is warning label free.

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 clearcoat **Interpon 810 YZ500D**

Powder Properties

Chemical type	Epoxy-polyester
Aspect	Chrome finish
Density	1.20
Storage	Dry cool conditions
Shelf life	Under dry, cool conditions – 30°C 12 months from delivery date
Stoving schedule (object temperature)	as a single coat: at 180°C : min. 15 min. – max. 30 min at 190°C : min. 10 min. – max. 25 min at 200°C : min. 6 min. – max. 20 min As a two layer coat: at 180°C : min. 10 min. – max. 15 min at 190°C : min. 8 min. – max. 12 min

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	0.5 mm steel
Pre-treatment	Iron phosphate (e. g. Bonder LH 60 OC)

System	Single coat	2 layer system
First layer	EW041D - 80 µm	EW041D - 80 µm
Curing	15 min - 180°C	15 min - 180°C
Second layer		YZ500D - 80 µm
Curing		15 min - 180°C
Mechanical tests		
Flexibility	ISO 1519	6 mm
Adhesion	ISO 2409	class 0
Erichsen Cupping	ISO 1520	> 3 mm
Durability and chemical tests		
Salt spray test	ISO 9227	240 h
corrosion creep		< 2 mm from scribe - class 0 loss of chrome effect
Humidity test	ISO 6270-2	240 h
		no blistering or loss of chrome effect no change of visual aspect
Exterior durability Florida Natural testing	Interior use only	240 h no change of visual aspect >50% gloss retention after 12 months
Chemical resistance	See Post Application	

Industrial application conditions

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

Recommended film thickness

90 - 110 microns

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
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.
- **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
Curing EW041D with higher temperatures or longer times might lead to adhesion problems and has to be tested on the customer's line conditions

Post application

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 this coating. This finish is sensitive to aggressive environments.

Exposure to aggressive Environments

The presence of leafing metal particles makes this coating sensitive to aggressive environments (steam areas of high humidity) and sensitive to scratching and rubbing. In these instances protection by overcoating with the clear coat **YZ500D** is recommended.
For further information please contact AkzoNobel.

Safety Precautions Disclaimer

Please consult the Material Safety Datasheet (PC010)
The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this 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. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.