

## **Product Data Sheet**

**AkzoNobel Powder Coatings** 

#### Interpon 700 MR

| <b>Product Des</b> | scripti | on |
|--------------------|---------|----|
|--------------------|---------|----|

**Interpon 700 MR** is a range of Aluminium metallic powder coatings (epoxy-polyeter) offering considerably improved resistance to degradation caused by exposure to conditions of high temperature and humidity.

The metallic lustre of the coating can be maintained for many times (dependent on product type) longer than a standard Aluminium metallic coating.

| Chemical type   | Epoxy Polyester   |
|-----------------|---|
| Density (g/cm³) | 1.2-1.7 g/cm³<br>depending on color and effect                    |
| Application     | Suitable for electrostatic spray                                  |
| Storage         | Under dry, cool (≤ 30°C) conditions (open boxes must be resealed) |
| Shelf life      | 24 months   |
| Curing schedule | 15 minutes at 180°C<br>10 minutes at 190°C<br>6 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.

| Substrate                               | polished steel     |
|---|--------------------|
| Pretreatment                            | Zinc Phosphate     |
| Film Thickness                          | 60-70 microns      |
| Curing Schedule<br>(Object Temperature) | 6 minutes at 200°C |

#### **Mechanical Tests**

| Adhesion         | ISO 2409<br>(2mm crosshatch) | Gt 0              |
|------------------|------------------------------|-------------------|
| Flexibility      | ISO 1519                     | Pass 3 mm         |
| Erichsen Cupping | ISO 1520                     | ≤ 7 mm            |
| Impact           | ISO 6272                     | > 30 kg·cm direct |

Interpon 700 MR Page 1 of 3



### Chemical and durability

Whilst maintaining the general protective and anti-corrosive properties of powder coatings, aluminum and copper/bronze metallic finishes, when submitted to the listed tests, may rapidly show a loss of metallic aspect.

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.

| Salt Spray<br>(500 hours)    | ISO 9227   | Pass - no corrosion creep more than 3 mm from scribe |
|------------------------------|--|--|
| Cyclic Humidity              | ISO 6270<br>(1000 hours)   | Pass – no blistering                                 |
| Distilled Water<br>Immersion | ISO 2812<br>(240 hours)  | Pass – no blistering                                 |
| <b>Exterior Durability</b>   | Not recommended for outdoor applications.  Some chalking after 6-12 months continuous outdoor exposure but less than pure epoxies. Protective properties not impaired. |  |
|                              |  |  |
| Chemical Resistance          | Generally good resis at normal temperatur  | tance to most acids and alkalis and oils es.         |

#### **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 700 MR** 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. Interpon 700 MR powders are available in bright Aluminium finishes, which are susceptible to scratching and finger marking.

Protection by use of clear polyester topcoat is recommended when the coated article is to be subjected to physical damage or outdoor environments. The topcoat should ideally be applied within 2 hours of the metallic coating and gloves should be worn when handling the metallic coated article.

Different substrates (Aluminium, steel, galvanized steel, etc.), use of primer, and big changes in film thickness may give a different aspect. Products with different codes should not be mixed even if same color and gloss.

| Recycling | Unused powder can be reclaimed using suitable equipment   |
|-----------|---|
|           | and recycled through the coating system, but a minimum of |
|           | 70% virgin powder should be used.                         |

# **Post Application**Contact with Chemical Agents

Contact, even for 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.

Interpon 700 MR Page 2 of 3



## Additional Information

Bright Aluminium finish grades of Interpon 700 MR are susceptible to scratching and finger marking. Protection by use of a clear polyester topcoat is recommended when the coated article is to be subjected to physical or environmental damage. When overcoating, it is recommended that the powder is "green" or only partially cured at 160°C to maximize intercoat adhesion.

The topcoat 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.

#### **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.

Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advices given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel.

Last Revision Date: 08.09.2021 Author: Como Lab