

Technical Datasheet

Interpon 700 AM

Epoxy-Polyester powder coatings with antimicrobial technology



Product description

Interpon 700 AM is a series of epoxy polyester hybrid powder coatings with antimicrobial technology. Interpon 700 AM is offering an optimum combination of decorative and protective qualities and granting very high chemical and mechanical properties of the cured film. These powders are commonly recommended for indoor usage.

Interpon 700 AM powders are available in the full range of colors in gloss, satin, textured, metallic and other special finishes or can be custom matched to the user's requirements.

Interpon 700 AM is a high-quality powder coating designed to meet decorative and functional demands. Additionally, Interpon 700 AM uses antimicrobial technology to reduce the number of microbes such as bacteria and mold. Test results have proven reduction of bacteria and mold up to 99.9%

Approvals

Resistance to Fire Approval A2,s1,d0 with film thickness up to 120 µm (generic polyester 700) according to EN13501-1

Powder properties

	Typical value
Chemical Type	Epoxy-polyester
Density	1.2 - 1.7 g/cm ³ , depending on colour and effect
Recommended film thickness	60 - 90µm
Shelf life	24 months below 30 °C
Storage Conditions	Under dry, cool ($\leq 30^{\circ}\text{C}$) conditions (open boxes must be resealed)
Curing schedule	15-20 min at 180°C 8-12 min at 190°C 5-7 min at 200°C

Pre-treatment

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

<http://www.interpon.com/contact-us/>

Copyright © 2024 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel

Revision Date: V2, 25.05.2024

Region: EMEA

AkzoNobel

Technical Datasheet

Interpon 700 AM

Epoxy-Polyester powder coatings with antimicrobial technology



Application

Powders can be applied by manual or automatic electrostatic spray equipment.

A good protection is linked with the recommended film thickness.

All powders can show small color differences from batch to batch, this is normal and unavoidable.

While AkzoNobel take every precaution to minimize visible differences, this cannot be guaranteed.

Applicators and fabricators are advised to use a single batch for parts that will be assembled together. Differences are more likely with special effect powders.

Bonded products have better application properties than blended products (more stable) but attention should still be paid to line settings in order to avoid "marble effect" and changes in aspect after recycling.

Different substrates (aluminium, steel, galvanized steel...), 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 colour and gloss.

It is recommended that for consistent application and appearance product be fluidized during application.

Application Method

Electrostatic

Recycling

A constant ratio between virgin and recycled powders should be fixed by the coater in order to achieve a consistent effect following the AkzoNobel rules.

Please consult AkzoNobel for further details as to the correct mixing ratio for virgin/reclaim powder.

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

For solid shades, unused powder can be reclaimed

Post application

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.

Test conditions

Actual product performance will depend upon the circumstances under which the product is used.

The results are based on mechanical and chemical tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for guidance only.

Pre-treatment

Zinc Phosphate

Substrate

Polished steel

Curing schedule

6 min at 200°C (object temperature)

Film Thickness

60 - 70µm

<http://www.interpon.com/contact-us/>

Copyright © 2024 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel

Revision Date: V2, 25.05.2024

Region: EMEA

AkzoNobel

Technical Datasheet

Interpon 700 AM

Epoxy-Polyester powder coatings with antimicrobial technology



Mechanical tests

	Typical value	Method/standard
Adhesion	Class 0	ISO 2409 (2 mm Crosshatch)
Erichsen cupping	Pass 7 mm	ISO 1520
Flexibility	Pass 3 mm	ISO 1519
Impact resistance	≥30 kg.cm	ISO 6272-2 (d)

Chemical and durability tests

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.

	Typical value	Method/standard
Chemical Resistance	Generally good resistance to acid, alkalis and oil at room temperatures.	
Salt spray test	Pass, no corrosion creep more than 3 mm from scribe, 500 h	ISO 9227

Environmental and durability tests

	Typical value	Method/standard
Humidity	Pass - no blistering or loss of gloss, 1000 h	ISO 6270-2 CH (Constant humidity)
Exterior durability	Some chalking after 6-12 months continuous outdoor exposure but less than pure epoxies. Protective properties not impaired. Not recommended for outdoor applications.	

Maintenance

For specific advice on Cleaning and Maintenance, please follow Powder Coatings: Cleaning & Maintenance of Surfaces for Industrial use available from AkzoNobel.

Repair

Surface preparation	Damaged areas must be clean and free of grease or rust. Dry-sand the area with 600 grade paper down to the substrate. The area must be completely free of dust and cleaned with a non-aggressive solvent before proceeding. Any damage of the coating system must be repaired as soon as possible.
Application	For repairs a PU (2K or 1K) liquid paint is recommended.

<http://www.interpon.com/contact-us/>

Copyright © 2024 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel

Revision Date: V2, 25.05.2024

Region: EMEA

AkzoNobel

Technical Datasheet

Interpon 700 AM

Epoxy-Polyester powder coatings with antimicrobial technology



Additional Information

Interpon 700 AM has been tested for antimicrobial efficacy in accordance with ISO 22196: 2011 and exhibited a minimum of 95% and up to 99.99% reduction in the population of *Escherichia coli* and Methicillin-Resistant *Staphylococcus aureus* (MRSA).

Testing was carried out by an independent laboratory and is classified as 'microbiological results satisfactory'. Silver ion technology has been proven effective against the following bacteria in laboratory conditions:

Multi Drug Resistant Bacteria

ESBL *Escherichia coli*
CRE *Klebsiella pneumoniae*
MRSA Methicillin Resistant *Staphylococcus aureus*
VRE Vancomycin Resistant *Enterococcus*

Bacteria

Acinetobacter baumannii
Bacillus subtilis
Campylobacter spp.
Clostridium difficile (excluding spore form)
Escherichia coli O157
Enterobacter aerogenes
Enterococcus faecalis
Legionella spp.
Listeria monocytogenes
Pseudomonas aeruginosa
Salmonella Enteritidis
Salmonella Typhimurium
Shigella spp.
Staphylococcus aureus
Staphylococcus epidermidis

Interpon 700 AM contains silver phosphate glass antimicrobial technology to preserve the coating surface and prevent degradation caused by microbial growth once applied to the intended substrate.

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.

<http://www.interpon.com/contact-us/>

Copyright © 2024 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel

Revision Date: V2, 25.05.2024

Region: EMEA

AkzoNobel