

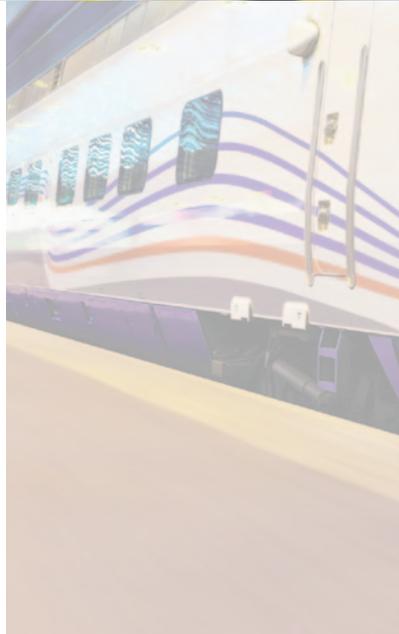
**Interpon**<sup>®</sup>  
powder coatings

EVERY COLOR IS GREEN



AkzoNobel

## Interpon Powder Coatings : Public Transportation Interiors



# AkzoNobel Powder Coatings Protect



The interiors of rolling stock which are used in the public transportation market are exposed to a wide range of aggressive environments and demand a top quality coating system to protect and maintain throughout their life cycle.

In particular the coating system provides protection against corrosion or UV degradation due to exposure to sunlight. It also protects against damage caused by the passengers either accidental - bumps, scrapes and spillages – or deliberate – scratches, graffiti, dents.

Also the coating provides an important decorative function in creating the correct ambiance within the carriage.

Powder coatings are the ideal solution for train interiors by providing outstanding protection, in a durable coating, which is resistant to graffiti and available in a broad palette of colors, in a paint finish which is also VOC free and environmentally friendly.

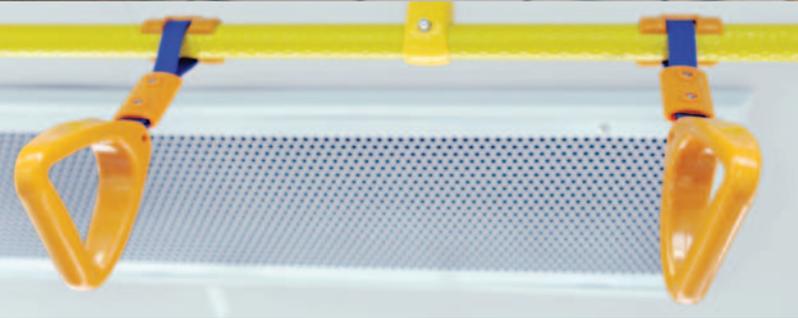


AkzoNobel Powder Coatings' range of products and services, designed for the public transportation market.

- Anti-graffiti:** Coatings with outstanding chemical resistance to withstand abuse from graffiti and cleaning materials.
- Anti-corrosion:** 1, 2 or 3 layer coating systems provide a cost effective solution for all environments.
- Color range:** AkzoNobel Powder Coating topcoats are available in the largest available range of colors and effects anywhere in the world.
- Exterior durability:** Topcoats, tested in Florida for up to 5 years to international standards, ensure they meet the tough UV durability demanded of some applications.
- In-mold coating:** Designed to be used in the molding process of composites to provide a durable, hard, finished product available in broad range of colors.
- Antimicrobial:** A range of coatings with antimicrobial properties designed for use in areas where there is a lot of human traffic.
- Mechanical:** All coatings are designed to meet the flexibility, hardness, impact and scratch resistance requirement of the end use.



# Corrosion Protection



## Zinc Free Active Anticorrosion Primers:

- Range name:** Interpon APP 120 series.
- Appearance:** Primer matched to topcoat color for improved coating system finish.
- Details:** Excellent protection for low to medium corrosivity environments.
- Features:** Zinc free, environmentally friendly.  
Offers good protection over phosphate pretreatment.  
Offers good system finish due to good flow of primer.  
Good edge coverage.  
Can be used as a holding primer for up to 6 weeks.
- End uses:** Door systems.  
Window frames.  
Luggage racks.  
Interior panel work.  
Electrical enclosures.

## Zinc Containing Active Anticorrosion Primers:

- Range name:** Interpon PZ series.
- Appearance:** Dark gray color.
- Details:** Highest level corrosion protection for all corrosivity environments.  
In Europe we have a network of **Interpon PZ** approved applicators.
- Features:** Patented AkzoNobel duplex technology.  
Combines barrier effect with cathodic protection.  
Best performance achieved over grit blasted substrate.  
Can also be applied over phosphate pretreatments.
- End uses:** Door systems.  
Window frames.  
Luggage racks.  
Interior panel work.  
Electrical enclosures.

# Fantastic on Plastic



## In-Mold Coatings:

- Range name:** Interpon IMPRESS.
- Appearance:** Available in Ral and NCS, or made to order colors.
- Details:** In-mold powder coatings cured and shaped together with the composite as a single coat finish or as a primer to achieve a class A finish on SMC and GMC.
- Features:** Excellent scratch and abrasion resistance.  
High surface hardness.  
Excellent adhesion.  
Excellent chemical resistance.  
Certified for BS6853, DIN 5510, EN45545, ISO5660, ISO 5659, ISO5658  
Repairable with liquid coating.  
Innovative processing.  
Increases manufacturing efficiency.  
Reduces manufacturing costs.
- End uses:** Seating.  
Interior composite panel work.  
Electrical enclosures.



# Tough on Graffiti

## Anti Graffiti Coating:

- Range name:** Interpon EC.
- Appearance:** Available in Ral and NCS, or made to order colors in full and semi gloss finishes.
- Details:** A highly chemical resistant coating, designed to facilitate removal of graffiti without damaging the coating surface.
- Features:** Resistant to graffiti and cleaners used to remove it.  
Excellent scratch resistance.  
Excellent chemical resistance.  
Certified for BS6853, DIN 5510, EN45545, ISO5660, ISO 5659, ISO5658.  
Exterior durability.  
Repairable with liquid coating.  
Reduces operational maintenance costs.
- End uses:** Door systems.  
Interior panel work.  
Air conditioning units.  
Window frames.  
Seating.  
Handrails.  
Luggage racks.  
Fixtures and fittings.  
Electrical cabinets.

## Range of Colors

- Range name:** Interpon D series.
- Appearance:** Available in a wide range of made to order Ral and NCS colors in full gloss, satin, matt and textured finishes. Extensive stock ranges held in some regions.
- Details:** Can be applied as a single coat or in combination with primers for harsh environments. Extensive Florida natural exposure test data and a long track record of use in the commercial building sector.
- Features:** Excellent adhesion.  
Certified for BS6853, DIN 5510, EN45545, ISO5660, ISO 5659, ISO5658.  
Excellent weatherability.  
Repairable with liquid coating.
- End uses:** Door systems.  
Window frames.  
Luggage racks.  
Interior panel work.  
Electrical cabinets.



# Interpon MasterSpec

	Test	Test Standard	Location of Coated Part			
			Visible	Hidden - Controlled Environment	Hidden - Aggressive Environment	Easy Clean Products
			Electrical cabinets, doors, panels, fairings, partitions, seats, tables, handrails	Ventilation ducting, seats, baffles, pipe fittings	Flooring area, WC area	Fixtures & fittings, air con units, handrails, doors, seating, tables, window frames, interior panels, electrical cabinets, luggage racks
Powder Characteristic	Density g/cm <sup>3</sup>	ASTM D5965	1.2 – 1.7	1.2 – 1.7	1.2 – 1.7	1.2 – 1.7
	Shelf life (month)	ASTM D5965	6 to 12	6 to 12	6 to 12	6 to 12
Gloss		ISO 2813 (60°)	5-95 (60°)	5-95 (60°)	5-95 (60°)	Smooth 50+ (60°) texture not recommended
Coating Mechanical Properties	Adhesion	ISO 2409-2007	0 (no peeling off) or 1 (peeling off less than 5%)	0 (no peeling off) or 1 (peeling off less than 5%)	0 (no peeling off) or 1 (peeling off less than 5%)	0 (no peeling off) or 1 (peeling off less than 5%)
	Pencil Hardness	ASTM D3363	H-2H	H-2H	H-2H	H-2H
	Flexibility	ISO 1519	bending diameter 3mm, no cracking	bending diameter 3mm, no cracking	contact AN technical	bending diameter 10mm, no peeling off, slight cracking
	Impact Resistance	GB/T 1732-93	Direct 50kg.cm, no peeling off, no cracking	Direct 50kg.cm, no peeling off, no cracking	contact AN technical	Direct 10kg.cm, no peeling off, slight cracking
	Abrasion Resistance	ASTM D4060	1000 cycles weight loss ≤ 80mg			
Coating Weathering & Corrosion Properties*	Neutral Salt Spray*	ISO 9227	500hrs, blister rate: 2(S3) (a little blistering, blister size ≤ 0.5mm); no surface rust; rust width on scribe ≤ 3mm	500hrs, blister rate: 2(S3) (a little blistering, blister size ≤ 0.5mm); no surface rust; rust width on scribe ≤ 3mm	750hrs, blister rate: 2(S3) (a little blistering, blister size ≤ 0.5mm); no surface rust; rust width on scribe ≤ 3mm	750hrs, blister rate: 2(S3) (a little blistering, blister size ≤ 0.5mm); no surface rust; rust width on scribe ≤ 3mm
	Acid Salt Spray**	ISO 9227	500hrs, blister rate: 2(S3) (a little blistering, blister size ≤ 0.5mm); no surface rust; rust width on scribe ≤ 3mm	500hrs, blister rate: 2(S3) (a little blistering, blister size ≤ 0.5mm); no surface rust; rust width on scribe ≤ 3mm	500hrs, blister rate: 2(S3) (a little blistering, blister size ≤ 0.5mm); no surface rust; rust width on scribe ≤ 3mm	500hrs, blister rate: 2(S3) (a little blistering, blister size ≤ 0.5mm); no surface rust; rust width on scribe ≤ 3mm
	Humidity	ISO 6270-1	1,000hrs no cracking, no blistering, adhesion 0 or 1	1,000hrs no cracking, no blistering, adhesion 0 or 1	1,000hrs no cracking, no blistering, adhesion 0 or 1	1,000hrs no cracking, no blistering, adhesion 0 or 1
	QUV-A Weathering	ASTM G154-06	-	-	-	500h gloss retention ≥ 50%, no cracking, no chalking
Anti-graffiti Performance***		AN test method	-	-	-	Very good or Excellent
Chemical Resistance***		AN test method	-	-	-	Very good or Excellent
Fire Retardant Performance	DIN5510	DIN 54837	above S3	above S3	above S3	above S3
			SR2	SR2	SR2	SR2
			ST2	ST2	ST2	ST2
		DIN EN ISO 5659-2	FED≤1	FED≤1	FED≤1	FED≤1
	BS6853	BS476-6	I<12;i<6	I<12;i<6	I<12;i<6	I<12;i<6
		BS476-7	Class 1 (1.5min flame surface spread≤165mm, 10min flame spread length≤165mm)	Class 1 (1.5min flame surface spread≤165mm, 10min flame spread length≤165mm)	Class 1 (1.5min flame surface spread≤165mm, 10min flame spread length≤165mm)	Class 1 (1.5min flame surface spread≤165mm, 10min flame spread length≤165mm)
		BS6853 Annex B	R<1.0	R<1.0	R<1.0	R<1.0
		BS6853 Annex D	Underground: Ao(ON)<4.2 Ao(OFF)<6.3 Ground: Ao(ON)<9.4 Ao(OFF)<14.0	Underground: Ao(ON)<4.2 Ao(OFF)<6.3 Ground: Ao(ON)<9.4 Ao(OFF)<14.0	Underground: Ao(ON)<4.2 Ao(OFF)<6.3 Ground: Ao(ON)<9.4 Ao(OFF)<14.0	Underground: Ao(ON)<4.2 Ao(OFF)<6.3 Ground: Ao(ON)<9.4 Ao(OFF)<14.0
Notes		* all result based on lab substrate, 0.6mm Zn-phosphate steel Q-panel ** all result based on lab substrate, 0.6mm Cr6+ chromate Q-panel Al *** Please contact AkzoNobel for details				

# We Support You!

## Customer Support:

AkzoNobel has a **global** technical and commercial team focussed on the demands of the Public Transportation Industry. We offer support throughout the design, specification and manufacture chain including:

- Interior Designer:** Advice on coating performance, color and support with test samples.
- Contractor:** Support and advice in preparation of specifications and testing of products to company, international and regional standards.
- Train Builders:** Support in building specification for contractors and ensuring correct products transferred to applicators.
- Applicators:** Ensure correct, specified products are used and provide local technical assistance in coating process cost and quality improvements.

## AkzoNobel Powder Coatings Standards and Support

AkzoNobel powder coating systems are designed to meet the requirements of the railways industry and are tested to meet industry standards such as:

## Flame Retardancy.

- CEN 45545-2**
- BS 6853**
- DIN 5510**
- NFF 16 101**

## Corrosivity Categories of Environment ISO 12944

Pieces exposure	Exterior atmosphere	Descriptions
<b>C2</b>	Corrosively low.	Rural zones. Low level of pollution.
<b>C3</b>	Corrosively middle.	Urban, industrial / coastal area moderated pollution low salinity.
<b>C4</b>	Corrosively high.	Industrial / coastal area. Moderate salinity.
<b>C5-I</b>	Corrosively very.	Industrial high humidity / aggressive.
<b>C5-M</b>	High (Industrial) Corrosively very.	Coastal / offshores area.



For more information speak to your local representative or visit [www.interpon.com](http://www.interpon.com)



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- |  |  |
|--|--|
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| Australia<br>Tel: +61 (0) 3 9313 4555                          | Mexico<br>Tel: +52 (818) 374 3244                        |
| Baltics<br>(Latvia, Lithuania, Estonia)<br>Tel: +371 293 75577 | Morocco<br>Tel: +212 (0) 522 67 87 67                    |
| Benelux<br>Tel: +32 (0) 2 255 2260                             | New Zealand<br>Tel: +64 (0) 9 828 3009                   |
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| Chile<br>+56 2 544 84 55                                       | Poland<br>Tel: +48 12 651 81 91                          |
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