Product Data Sheet

AkzoNobel Powder Coatings

Interpon BPP 600 (AL251F)

Product Description

Interpon BPP 600 is a pure epoxy barrier protective powder primer, designed to give enhanced corrosion protection of mild steel. **Interpon BBP 600** is an anticorrosion primer that can be used in a wide variety of subs environment. It's wide curing conditions, good edge coverage and enhanced degassing properties make **Interpon BPP 600** the most versatile primer.
Interpon BPP 600 must be over-coated with an **Interpon** powder or a **Cromadex** PU liquid topcoat.
Interpon BPP 600 could be used as holding primer with a maximum waiting delay of 1 week.
Key benefits: wide curing range, excellent edge coverage, good anti gassing properties

Qualicoat: P-0740 (Interpon 100 + Interpon D) for aluminium substrate
Qualisteelcoat:
Mild steel – 2 coat system - up to C4H environments - mechanical pretreatment
Interpon BPP600 + Interpon D2525: approval P0019
Interpon BPP600 + Interpon D1036: approval P0021
Mild steel – 2 coat system - up to C4H environments - chemical pretreatment
Interpon BPP600 + Interpon D2525: approval P0022
Interpon BPP600 + Interpon D1036: approval P0020
Metal spray up to C5M/C5I environments - mechanical pretreatment
Interpon BPP600: approval P0033
Galvanized steel up to C5M/C5I environments – mechanical pretreatment
Interpon BPP600: approval P0031

Powder Properties

Chemical type	Thermosetting epoxy
Aspect	Grey, smooth
Particle Size	Suitable for electrostatic spray
Specific gravity	1,60 - 1,65 g/cm³
Storage	Dry condition below 25°C
Shelf life	12 months
Stoving schedule	To match user's requirements
Gloss	5-15 units

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	Steel
Pretreatment	Iron phosphate
Primer Thickness	60-80 microns
Stoving Schedule (with TopCoat)	10 minutes at 200°C (system) *(Topcoat – Interpon D1036 Ral 9010 60-80 microns)*

Mechanical Tests

Flexibility	ISO1519:1973 (Cylindrical Mandrel)	Pass 5mm (BPP mono-coat) Pass 5mm (System)
Adhesion	ISO2409-1992 (2mm crosshatch)	Pass 6mm (BPP mono-coat) Pass 4mm (System)
Erichsen Cupping	ISO1520	Pass 6mm (BPP mono-coat) Pass 4mm (System)
Impact	ISO6272:1993	Pass 0.5 kg.m (BPP mono-coat) Pass 0.5 kg.m (System)

Corrosion Tests on Mild Steel

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.

Neutral Salt Spray	ISO7253	Results are detailed in Table 1 of Appendix

Pretreatment

Surface preparation depends upon the metal, the type of surface, its conditions and the required performance.

Substrate	Mechanical pretreatment	Chemical pretreatment
Mild steel	Grit blasting SA 2.5 in accordance with ISO 8501.1, 1998 (F), roughness equivalent to B9a, B10a (Rz 35-65 microns; Ra 6-10 microns) using Rugotest n°3 LCA-CEA, in accordance with NFE 05051 (1981)	Degreasing & phosphating followed by passivation, DW rinsing and drying.
Cast steel		
Zinc plated steel	Sanding	
Aluminium	Sweeping	Chromating or Phostphating or phosphochromating or **Cromadex 903** liquid primer.
Stainless steel		Not recommended
Brass		Degreasing & etching or **Cromadex 903** liquid primer
Hot dip galvanized steel	Sweeping with a maximum zinc layer thickness reduction of 5 to 10 µm depending on the initial zinc thickness	
Zinc sprayed	Light sanding	Not recommended

Application

Interpon BPP 600 is suitable for corona electrostatic spray and for tribo depending on the tribo equipment.

Recommended film thickness	60-80 µm A good protection is linked with the recommended film thickness.
Recycling	Unused powder can be reclaimed using suitable equipment and recycled through the coating system, but a minimum of 70% new powder should be used.

Curing

Interpon BPP 600 shows a wide curing range must allowing application on a substrates of different nature and thicknesses.

		Ferrous and non-ferrous substrates			
		Green curring		Full curring	
	Object temperature	Mini	Max	Mini	Max
Stoving Schedule	130°C	10′	20′	NA	NA
	140°C	2′	7′	NA	NA
	160°C	NA	NA	12′	30′
	180°C	NA	NA	10′	25′
	200°C	NA	NA	4′	15′
	210°C	NA	NA	2′	10′

Interpon BPP600 should be cured in a convection oven, optionally with/ or infra-red heaters.
Full curing is required for application on porous substrates

Topcoat Application	**Interpon BPP 600** should ideally be overcoated within 24 hours of application. However the overcoating could be done until 1 week after application and if needed with a preliminary cleaning. To ensure the cohesion of the Interpon **BPP 600 powder** system, as well as optimum performance, the whole system must be cured in accordance with the recommended curing conditions of the powder topcoat. For a use as a holding primer before overcoating the primer should be cleaned. Remove dust by blowing with clean dry air and/or brush with a soft brush. For overcoating with a liquid PU topcoat **Interpon BPP600** must first undergo a slight dry sanding with a 800 sandpaper. be fully curing according to the topcoat stoving recommendations.
Damage repair	Any damage to the **Interpon BPP600** system must be repaired as soon as possible. **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. **Application** For repairs a PU (2K or 1K) liquid paint is recommended.
Safety Precautions	Please consult the Material Safety Datasheet (MSDS)
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. 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**

Akzo Nobel Powder Coatings Ltd.
Worldwide Powder Group
Stoneygate Lane, Felling
Tyne & Wear
NE10 0JY

T +44 (0) 191 469 6111
F +44 (0) 191 438 5431
www.interpon.com

Interpon BPP600 - Issue 3
Issued: 09/10/2014 Revision Date: 05/09/2018

Coating System			**Interpon BPP 600 + Interpon D1036**		
Conditions	Substrate		Steel 2mm		
	Pretreatment		**Grit blasting** SA 2.5 – Ra 6-10µm		
	Interpon BPP 600 thickness		60 - 70 µm		
	Interpon D1036 Ral 9010 thickness		70 - 80 µm		
	Adhesion on surface before test		Class 0		
Neutral Salt Spray ISO 9227	Time	Quotation	Corrosion	Blistering	Adhesion
	1000 hours	Scribe	X	Size 2 Degree 1	Loss 1.5 mm
		Surface	Ri 0	None	Class 0
	2000 hours	Scribe	X	Size 2 Degree 3	Loss 2 mm
		Surface	Ri 0	None	Class 0

Appendix

Table 1: **Neutral Salt Spray Test.**

Results quotation of accelerated ageing tests.

	Adhesion	**Rust**	**Blistering**
At scribe	Loss of adhesion from edge of scribe, in mm (by peeling using a scalpel)	0 None X Slight XX Moderate XXX Severe	**Degree of blistering** in accordance with ISO 4628 0: None 1: Some defects 2: Small 3: Medium 4: Important 5: Very important
On general Surface	In accordance with ISO 2409 Class 0: no peeling to Class 5 : total peeling	In accordance with ISO 4628 Ri0: 0% Ri1: 0.05% Ri2: 0.5% Ri3: 1% Ri4: 8% Ri5: 40 to 50%	**Blisters size** in accordance with ISO 4628 0: None (invisible at 10x magnification) 1: Just visible (10x magnification) 2: Just visible (normal vision) 3: Clearly visible (≤0.5mm) 4: 0.5 to 5 mm 5: > 5 mm