Product Datasheet

Interpon BPP 330

AL117D

Product Description	**Interpon** BPP 330 is a barrier protective powder primer that is designed to give enhanced corrosion protection of mild steel and hot dip galvanized steel.**Interpon** BPP 330 is a pure epoxy primer showing a high cross-linking degree and reinforced with barrier effect agents to provide the best barrier protection. **Interpon** BPP 330 must be overcoated with a powder or a PU liquid topcoat. **Interpon** BPP 330 could be used as holding primer with a maximum waiting delay of 1 week.		
Powder Properties	**Chemical type**	Thermosetting epoxy	
	Particle size	Suitable for electrostatic spray, tribo and corona	
	Specific gravity	1,44 - 1,50 g/cm³	
	Storage	Dry, cool conditions below 25°C	
	Stoving schedule (object temperature)	15 - 30 minutes at 130°C (green cure) 10 - 14 minutes at 160°C 6 - 10 minutes at 170°C 2 - 4 minutes at 180°C	
Coating	**Aspect**	Grey, smooth	
	Gloss	65 - 75 units	
	Mechanical tets Tests 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	Steel
		Pre-treatment	Iron Phosphating
		Primer thickness ISO2360	60 - 80µ
		Curing	10 min at 160 °C (BPP 330 alone)
		Powder Topcoat	**Interpon** D1036
		Curing	10 min at 200°C (system)
	Adhesion	ISO 2409	Class 0 (BPP 330 alone) Class 0 (system)
	Erichsen Cupping	ISO 1520	8mm (BPP 330 alone) 6mm (system)
	Impact	ISO 6272	0,5 kg.m (BPP 330 alone) 0,5 kg.m (system)
	Flexibility	ISO 1519 (Cylindrical mandrel)	5 mm (BPP 330 alone) 5 mm (system)
	Corrosion Tests on Mild Steel		
	Tests 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.	
	Natural Salt Spray	ISO 9227	Results are detailed in Table 1 of the Appendix (page 3)
	Cycle 3 C	Renault D17 1686	Results are detailed in Table 2 of the Appendix (page 3)
	Corrosion Tests on Hot Dip Galvanized Steel		
	Tests 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	Hot Dip Galvanized Steel
		Pre-treatment	Sweeping
		Primer thickness ISO2360	60 to 100 µ
		Curing	10 min at 160 °C (as primer for complete system)
		Powder Topcoat	**Interpon** D1036 Ral 6005
		Curing	10 min at 200°C
	Natural Salt Spray	ISO 9227	After 720h of Salt Spray exposure, the adhesion (following ISO 2409) is Class 0 – Class 1 on the surface

Industrial application conditions	**Pretreatment**	For maximum protection it is essential that **Interpon** BPP 330 is applied to a clean, dry, oxide-free surface, followed by a recommended **Interpon** topcoat. Surface preparation depends upon the metal, the type of surface, its condition and the required performance. For good protection again corrosion the following is recommended : **Mild Steel** - Grit blasting to at least SA 2.5 in accordance with ISO 8501.1, 1998(F), roughness equivalent to B9a, B10b or B10a (Ra 6 - 12 µ) using Rugotest n°3 LCA-CEA, in accoradance with NFE 05051 (1981) and/or - Degreasing & Posphating followed by passivation, rinsing DW and drying. **Galvanized Steel** - Sweeping with a maximum zinc layer thickness reduction of 5 to 10 µ depending of the initial zinc thickness or - Degreasing & Chromating or Zn/Zn-Ni Phosphating. A degassing operation just before coating reduces the bubbling phenomenon.
	Recommended film thickness	60 - 100 microns A good protection is linked with the recommended film thickness.
	Application	**Interpon** BPP 330 can be applied by corona or tribostatic equipment.
	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 330 should be partially or fully cured using the recommended stoving schedules before application of the topcoat. For an immediate covering of the primer with the powder topcoat and to provide the best adhesion between them we recommend to prefer the green cure conditions of the primer. For a use as holding primer, **Interpon** BPP 330 must be baked at 10 min/160°C or 6 min/170°C or 2 min/180°C. The primer should be cured in a convection oven, optionally with/or infra-red heaters, with air temperature not exceeding 180°C. ***Note** : Failure to comply with the recommended curing conditions may affect the adhesion of the topcoat and cause degradation of the coating properties of the system. Parts coated with Interpon BPP 330 should not be handled carefully avoiding any surface contamination.*
	Topcoat Application	**Interpon** BPP 330 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 integrity of the **Interpon** BPP 330 powder system, as well as optimum performance, the whole system must be cured in accordance with the recommended curing conditions for the topcoat. For overcoating with a PU liquid topcoat, guidance should be sought from Akzo Nobel Powder Coatings.
	Damage repair	Any damage to the **Interpon** BPP 330 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	When using do not eat, drink or smoke. Do not breathe the dust. In case of insufficient ventilation wear suitable respiratory equipment. For further information please refer to the specific product Material Safety Data Sheet (PC010)	

Table 1 – Neutral Spray test

Coating system			**Interpon BPP 330 + Interpon D1036**		
Conditions		Substrate	Steel 2mm		
		Pretreatment	**Grit blasting** SA 2.5 - Ra 6-12µ		
		Interpon BPP 330 thickness	60 - 70 µ		
		Interpon D1036 Ral 9010 thickness	70 - 80 µ		
		Adhesion on surface before test	Class 0		
Neutral Salt Spray ISO 9227	Time	Quotation	Corrosion	Blistering	Adhesion
	1000 hours	Scribe	XX	Size 4 Degree 1	Loss 1,5 mm
		Surface	Ri 0	None	Class 0
	1522 hours	Scribe	XX	Size 4 Degree 3	Loss 2 mm
		Surface	Ri 0	None	Class 0

Please refer to the quotations page 4

Table 2 – Cycle 3C

Coating system			**Interpon BPP 330 + Interpon D1036**		
Conditions		Substrate	Steel 2mm		
		Pretreatment	**Grit blasting** SA 2.5 - Ra 6-12µ		
		Interpon BPP 330 thickness	70 - 80 µ		
		Interpon D1036 Ral 7022 thickness	80 - 90 µ		
		Adhesion on surface before test	Class 0		
3C Cycle Renault method ME D17 1686 One cycle description: - 24h salt spray - 4x24h (8h humid chamber 40°C-98%RH ; 16h normal chamber 20°C-73%RH) - 48h drying chamber 20°C-63%RH	Cycles number	Quotation	Corrosion	Blistering	Adhesion
	3 cycles	Scribe	X	Size : 4 Degree 4	Loss 2 mm
		Surface	Ri 0	None	Class 0
	6 cycles	Scribe	X	Size 4 Degree 4	Loss 4 mm
		Surface	Ri 0	None	Class 0
	9 cycles	Scribe	X/XX	Size 5 Degree 5	Loss 5 mm
		Surface	Ri 0	None	Class 0

Please refer to the quotations page 4

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 (≤ 0,5 mm) 4 : 0,5 to 5 mm 5 : > 5 mm

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