

Interpon APP120

Product Description: **Interpon APP120** is a powder coating primer that is designed to give enhanced corrosion protection of mild steel. **Interpon APP120** is formulated to be over coated with powder topcoats such as **Interpon TC**, **Interpon D1094**, **Interpon D1036**, **Interpon D2525** or **Interpon D2000**. In this data sheet, the **Interpon APP120** primer over coated with a finish is termed the "**Interpon APP120** system".

Powder Properties:	Chemical type	Epoxy polyester hybrid
	Appearance	Light grey satin (other colours available)
	Particle size	suitable for electrostatic spray
	Specific gravity	1.65-1.75 g/cm ³
	Storage	Dry, cool conditions below 30°C
	Stoving schedule	15 minutes at 180°C
	(object temperature)	10 minutes at 200°C

Test Conditions: The results shown below are based on mechanical and corrosion tests which (unless otherwise indicated) have been carried out under laboratory conditions using a complete coating system and are given for guidance only. Actual product performance will depend upon the circumstances under which the product is used.

Mechanical Tests:	Substrate	Steel, Bonderite 1000,0.8mm
	Pretreatment	iron phosphate with chromate passivation
	Film Thickness	70±10 microns
	Curing	2 minutes at 200°C (as primer for complete system)
	Powder Topcoat	Interpon D36 (RAL9010)
	Film Thickness	70±10 microns
	Curing	10 minutes at 200°C (object temperature)

Corrosion Tests:	Substrate	Steel, 0.8mm thick (pretreated panels)
	Pretreatment	As detailed in results tables in Appendix (page 3)
	Film Thickness	As detailed in results tables in Appendix (page 3)
	Curing	As detailed in results tables in Appendix (page 3)

Mechanical Tests:	Adhesion	ISO2409 (2mm Crosshatch)	0 (APP120 alone) 0 (APP120 + topcoat)
	Erichsen Cupping	ISO1520	Pass 7mm (APP120 alone) Pass 6mm (APP120 + topcoat)
	Impact	ISO6272	Pass 2mm
	Flexibility	ISO6860	Pass 3mm (APP120 alone)
		(Conical Mandrel)	Pass 3mm (APP120 + topcoat)

Corrosion Tests: The **Interpon APP120** system provides excellent protection against corrosion on the surface to which it is applied. However the efficiency of this protection depends upon the surface, its preparation before coating and the topcoat applied. If there is penetrating damage to the coating system, there may be localised signs of corrosion where damage has occurred but this will not affect the adhesion of the film to the adjacent surface. **Interpon APP120** considerably limits the extent of spread of corrosion in the event of coating damage.

Hot Neutral Salt Spray	ISO9227 (ASTM B117)	3000 hours Results are detailed in Table 1 and Table 2 of the Appendix (page 3)
GM Cyclic	General Motors GME 60203	15 cycles Results are detailed in Table 1 of the Appendix (page 3)
Natural Exposure	ISO 12944	Results are detailed in Table 1 of the Appendix (page 3)

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Pretreatment: For maximum protection it is essential that **Interpon APP120** is applied to a clean, dry, oxide-free ferrous metal surface, followed by a recommended **Interpon** topcoat. Surface preparation depends upon the type of surface, its condition and the required performance. For good protection against corrosion the following is recommended:
Degreasing & phosphating followed by passivation, rinsing with demineralised water and drying. Follow the procedural advice of the pretreatment supplier **and/or Blast clean** to at least SA 2.5 in accordance with ISO8501.1, 1988 (F), or Swedish standard S15 05.09.00. with a sharp angular surface profile of 50 -75 microns in accordance with ISO 8503/1 for grit ($R_a = 6-12$ microns).

Application: **Interpon APP120** can be applied by manual or automatic standard electrostatic spray equipment.
Interpon APP120 can be formulated for tribo application.
Recommended film thickness 70 ± 10 microns.
Unused powder can be reclaimed using suitable equipment and recycled through the coating system, but a minimum of 70% new powder should always be used.
Interpon APP120 should be partially or fully cured using the recommended stoving schedules, before application of the topcoat. The object temperature must not be below 130°C nor above 220°C . The primer should be cured in a convection oven, optionally with infra-red heaters, with air temperature not exceeding 220°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 APP120 should not be handled if possible. If handling is unavoidable, clean lint-free gloves must be worn.

Topcoat Application: **Interpon APP120** should ideally be overcoated within 24 hours of application.
For longer periods before overcoating guidance should be sought from Akzo Nobel Powder Coatings.
To ensure the integrity of the **Interpon APP120** system, as well as optimum performance, the whole system must be cured in accordance with the recommended curing conditions for the topcoat. Curing should be carried out in a convection oven, optionally with infra-red heaters. There must be a uniform heat distribution inside the oven.
Note: Failure to comply with the recommended final curing conditions may cause variations in colour and gloss and cause degradation of the coating properties of the system.
A detailed protocol for applying **Interpon APP120** and the recommended **Interpon** topcoat is available on request.

Damage Repair: Any damage to the **Interpon APP120** system must be repaired as soon as possible.

Surface preparation Damaged areas must be clean and free of grease or rust. Using 600 grade paper dry-sand the area down to substrate. The area must be completely free of dust and cleaned with a non-aggressive solvent before proceeding.

Application For repairs the following two-coat liquid paint system from International Protective Coatings Cromadex is recommended:
1st Coat : two-pack acid etch primer.
2nd Coat : two-pack polyurethane topcoat, **Interthane 990**
or Cromadex 600
Product Data Sheets for these products can be obtained from International Protective Coatings at Felling (Tel: +44 (0) 191 469 6111) or the local office. For your nearest Cromadex centre, visit cromadex.com.

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 (MSDS)

Disclaimer: The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this 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. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

