

Interpon PZ 770

Product Data Sheet

Product Description: **Interpon PZ 770** is a powder coating primer containing zinc, which is designed to give enhanced corrosion protection of abrasive blast cleaned steel. **Interpon PZ 770** has been designed to be over coated with powder coating topcoats such as **Interpon 610**, **Interpon D610** or **Interpon EC**. In this data sheet, the **Interpon PZ 770** primer over coated in this way is termed the "**Interpon PZ 770 System**".

Powder Properties*:	Chemical type	Thermosetting epoxy, rich in zinc
	Appearance	Grey metallic, slightly granular film
	Particle size	suitable for electrostatic spray
	Specific gravity	1.8-2.2 g/cm ³
	Storage	Dry, cool conditions below 30°C
	Stoving schedule (Object temperature)	12-23 minutes at 160°C (minimum) or 8-17 minutes at 170°C or 2-8 minutes at 200°C or 1.5-5.5 minutes at 220°C (maximum)

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, 0.5mm thick
	Pretreatment	Cold trichloroethylene degreasing
	Film Thickness	70±10 microns
	Curing	8 minutes at 200°C (PZ770 alone) 2 minutes at 200°C (as primer for complete system)
	Powder Topcoat	Interpon D610 (RAL9010)
	Film Thickness	65±5 microns
Corrosion Tests:	Substrate	Steel, 6mm thick
	Pretreatment	Grit blasted to SA2.5, surface profile 50 micron
	Film Thickness	150 microns (75 microns PZ770 plus 75 microns topcoat)
	Curing	2 minutes at 200°C (primer) plus 8 minutes at 200°C (with topcoat)

Mechanical Tests*:	Adhesion	ISO2409 (2mm Crosshatch)	0 (PZ770 alone) 0 (system)
	Erichsen Cupping	ISO1520	Pass 8mm (PZ770 alone) Pass 6mm (system)
	Impact	ISO6272	Pass 0.5kg.m (PZ770 alone) Pass 0.5kg.m (system)
	Flexibility	ISO1519 (Cylindrical Mandrel)	Pass 4mm (PZ770 alone) Pass 5mm (system)
		ISO6860 (Conical Mandrel)	Pass 0cm (PZ770 alone) Pass 0cm (system)

Corrosion Tests*: The **Interpon PZ 770 System** provides excellent protection against corrosion on the surface to which it is applied. However the efficiency of this protection depends on 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 PZ 770** considerably limits the extent of spread of corrosion in the event of coating damage.

Neutral Salt Spray	ISO9227	3000 hours, less than 1mm creep from scribe
Cycle 3C	Renault D17 1686	15 cycles, no rust, blisters, or adhesion loss
SCAB Corrosion	Volvo STD 1027, 1372	24 months exposure, no surface rust and less than 1 mm propagation from scribe
Natural Exposure		36 months (Bohus-Malmö Island) 0.5 mm propagation of corrosion from scribe

Pretreatment: For maximum protection it is essential that **Interpon PZ 770** 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:
Abrasive blasting to at least SA 2.5 in accordance with ISO8501.1, 1988 (F), to produce a sharp angular surface profile of 50-75 microns in accordance with ISO8503/1 for grit
and/or
Degreasing & phosphating followed by passivation, rinsing with demineralised water and drying. Follow the procedural advice of the pre-treatment supplier.

Application: **Interpon PZ 770** can be applied by manual or automatic electrostatic spray equipment. The application conditions given below are for information only:

Fluidising air pressure: 1.5kg/cm² initially then 1kg/cm²
Transport air pressure: 0.5 to 0.8kg/cm
Recommended voltage: 65 to 70kV
Recommended thickness: 70 microns (+20/-10)

Reclaiming Interpon PZ 770:

Trials with suitable recycling equipment must be carried out before commencing production. Attention should be paid to the ratio of new powder; a minimum of 80% must be used. Gun nozzles must be cleaned every 30 minutes

Interpon PZ 770 should be cured, or at least gelled, 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 PZ 770** should not be handled if possible. If handling is unavoidable, clean lint-free gloves must be worn.

Topcoat Application: **Interpon PZ 770** should ideally be over coated on the same site within 4 hours of applying the primer. If the delay exceeds 4 hours the parts should be heated for 10 minutes at 120-150°C (object temperature). The delay must not exceed 12 hours. Refer to the Product Data Sheet for the powder coating topcoat for application parameters.

To ensure the integrity of the **Interpon PZ 770** 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 PZ 770** and the recommended **Interpon** topcoat is available on request.

Damage Repair: Any damage to the **Interpon PZ 770** 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 the following two-coat liquid paint system from International Protective Coatings is recommended:
1st Coat : two-pack zinc-rich epoxy primer, **Interzinc 72**
2nd Coat : two-pack polyurethane topcoat, **Interthane 990**
Product Data Sheets for these products can be obtained from International Protective Coatings (Tel: 13 14 74).

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: Unless otherwise agreed by us in writing, any contract to purchase products referred to in this brochure and any advice which we give in connection with the supply of products are subject to our standard conditions of sale. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

* Typical minimum specifications. Performance may vary slightly between individual products.

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