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PRODUCT INFORMATION SHEET

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2 PACK ISO-FREE FINISH

Description:

A two pack isocyanate free topcoat which is used where outstanding outdoor weather resistance, durability, gloss, and colour retention are required. It offers excellent resistance to spillage and splash of acids, alkalies, salts, oils, solvents, many chemicals, fresh water and salt water.

Uses:

Ideally suitable for auto, industrial and marine applications. Suitable for use both for structural maintenance and new building construction projects. It may be applied to a variety of metal surfaces after application of a suitable primer or undercoat.

Typically used on steel structures, industrial equipment and machinery such as found in manufacturing and chemical plants, hospitals, food processing plants, dairies, abattoirs, automotive, marine and sign writing industries.

Excellent for use on MDF, craftwood, particle board, chipboard, hardboard and timber surfaces.

Not recommended for immersed conditions. Consult HiChem for specific recommendations.

Not recommended for use on open grained timbers.

Properties:

Outstanding adhesion. Excellent abrasion resistance. Very good gloss and colour retention

Excellent resistance to spillage and splash of acids, alkalies, salts, solvents, chemicals and water.

Temperature resistance up to 70 °C, 100°C occasional exposure.(dry heat).

Suitable Substrates:

After suitable preparation and priming, *2 Pack Iso-Free Finish* may be applied to steel, galvanised and zinc coated steel, aluminium, and fibreglass structures.

May be applied direct over *HiChem 2 Pack Epoxy Primer*, *2 Pack Iso-Free Primer- Isolator* and *Super Etch Primer*.

May be applied over suitable previously painted surfaces after isolating with *2 pack Iso Free Primer-Isolator*. Test a small area.

Surface Preparation

Steel: For industrial use prepare by abrasive blast cleaning to AS1627.4 Class 2.5. Clean and degrease with *Prepwash*. Apply *HiChem 2 Pack Epoxy Primer* to a dry film build of 50 microns.

For automotive use abrade with coarse abrasive pad or abrasive paper. Clean and degrease with *Prepwash*. Apply any *HiChem* or *Motospray* automotive primer.

Galvanised steel, zinc coated steel and aluminium: Abrade with coarse abrasive pad or abrasive paper. Clean and degrease with *Prepwash*. Apply *HiChem Super Etch Primer* to a dry film build of 6-12 microns.

Fibreglass: Sand with 280-320 grit paper. Degrease with *Prepwash*. Apply *HiChem 2 Pack Epoxy Primer* or *2pack Iso Free Primer-Isolator*.

Previously painted surfaces: Remove loose and flaking paint. Sand until gloss removed. (280-320 grit paper).

If bare metal is exposed, carefully feather edges of remaining paint. Spot prime bare metal using *2 Pack Iso-Free Primer-Isolator*. Then prime whole surface with *2pack Iso Free Primer-Isolator*.

Mixing/Thinning:

Mix 3 parts by volume of *2 Pack Iso-Free Finish* with 1 part by volume of *2 Pack Hardener 31* (Normal or Slow).

If required add up to 5% thinner 701N or 701S to the total mixed material.

Application viscosity should be approx. 18 secs. by Ford cup no. 4 at 20C.

N.B. Choose Hardeners and Thinners according to size of object and/or temperature prevailing at the time.

Drying time will vary accordingly. For example : If the temperature is above 20°C and large areas are to be painted use Iso-Free Hardener 31 (Slow) and Thinner T701S (Slow). For full vehicle respray a combination of Slow Hardener and Slow Thinner is recommended.

Application:

1. Apply 2 or 3 single wet coats allowing a flash off time of 10-15 minutes between coats.
2. Apply using conventional spray gun with a nozzle size of 1.8 to 2.0mm, or airless spray. Brush or roller may be used for small areas only.
3. Apply mixed and thinned material to a dry film thickness of 50 microns.

4. In certain aggressive conditions a second application as above may be required to give a total dry film thickness of 100 microns.

5. *2 Pack Iso-Free Finish* must not be applied when the surface temperature falls below 10°C or when dew is present on the surface. Avoid forced ventilation with heated air before surface has dried otherwise solvent entrapment may occur.

Notes: *2 Pack Iso-Free Finish* may have its gloss level reduced with *Universal Flattening Base*.
Tinters should not be used alone as hiding power may not be adequate.

Drying Time: **Air dry:** Tack free in 30 minutes at 20°C and ready for assembly in 24 hours.

Low Bake: A 15 minute flash-off time is required before force drying for 60 minutes at 60°C metal temperature.

Infra-red: Medium wave 17KW. Flash off for 10 minutes. Expose for 35 minutes on medium power at a distance of 40-60cm.

Full cure, under ambient conditions, is achieved in approx. 7 days.

Recoating and Repairing Iso-Free Finish

Please follow the curing requirements in 1, 2, 3 below before recoating.

1. Air Dry

<i>Substrate Temp (°C)</i>	You must adhere to either of the two rework periods.
10	Rework within 24hrs OR wait for 7 days before rework
20	Rework within 24hrs OR wait for 6 days before rework
30	Rework within 16hrs OR wait for 4 days before rework
35	Rework within 10hrs OR wait for 3 days before rework

2. **Low bake:** allow to cool to room temperature before rework.

3. **Infra-red:** allow to cool to room temperature before rework.

Lightly sand the surface with P800 paper.

Wipe the surface with *Prepwash*. Tack rag prior to painting.

Apply 2-3 coats of *Iso-Free Finish*.

If sanding during rework results in breaking through topcoat then isolate area with *Motospray Isolator* or *HiChem 2 Pack Iso-Free Primer- Isolator*.

Polishing:

After 24 hours drying, wet sand the area with 1500 to 2000 grit WD paper using warm soapy water, then buff with *Motospray Machine Grade Cutting Compound* and polish with *Motospray Non Silicone Polish*. For best results compounding and polishing should be performed between 3 and 6 days after the application of the 2 *Pack Iso Free Finish*.

Pot Life: Approx. 10 hours at 20 °C

Coverage: Theoretical coverage at 50 microns average film thickness is 8.7 m² per litre. Material losses during application will vary and must be taken into account when calculating requirements.

Clean up: Clean up with *Superglow Multipurpose Thinners*.

Storage: Store in a cool dry place. Always replace the lid securely after use.

Shelf life 24 months in unopened sealed container if stored away from heat and moisture.

Safety: See material safety data sheet. Use Organic Vapour Mask to AS 1715/AS 1716

Standard Packages and Product Codes:

1. Stock Colours:

System Components	Size	White	Black
2 Pack Iso Free Finish	15 Litre	IFWC15	IFB15
	3 Litre	IFW3	IFB3
		Normal	Slow
2 Pack Hardener 31 Normal & Slow	5 Litre	2PIFH5	2PIFHS5
	1 Litre	2PIFH1	2PIFHS1
	250 mls	2PIFH250	2PIFHS250
Thinner T 701 Normal & Slow	20 Litre	T701N20	T701S20
	4 Litre	T701N4	T701S4
	1Litre	T701N1	T701S1

2. Factory Made Colours:

Machine mixed colours from existing formulae in the tinting system. Available in 3 & 15 litres.

Colours matched to customer requirements. Minimum order 200 litres.

3. Tinting System:

Our tinting system contains a huge range of colours.

14 Tinters (4 litre), paddles, lids, stirring handle, microfische formulae

Code IFS

The information contained in this bulletin is presented in good faith based on thorough laboratory and field testing but without warranty. As we have no control over the conditions under which these products are used, it is recommended that all products be tested by the end user to ensure the suitability of the product for the particular application and conditions.