

DUREPON® FRX

Two Pack Cold Curing Epoxy Zinc Phosphate Primer

PC 204

FEATURES

- LOW TEMPERATURE CURE
- FAST RECOAT
- CONTAINS HIGH LEVELS OF ZINC PHOSPHATE
- EASY APPLICATION

USES DUREPON® FRX is a versatile primer suitable for application to heavy duty steelwork at low temperatures. It is useful as a tie-coat over inorganic zinc primers and under a wide range of topcoats.

Unlike typical epoxies, DUREPON® FRX does not have a narrow recoat window – it can be recoated with itself or topcoated after longer periods than typical epoxies.

DUREPON® FRX can be overcoated with epoxy, polyurethane or acrylic finishes depending upon service requirements. It has excellent adhesion to blast-cleaned steel, excellent corrosion resistance and rapid dry times, even at temperatures down to 0°.

SPECIFICATIONS AS/NZS 3750.13 Type 2

RESISTANCE GUIDE

WEATHERABILITY	Will yellow with time and chalk on exterior exposure. Neither yellowing nor chalking detracts from the protective properties of the coating. Use a weatherable topcoat if required for appearance.	SOLVENTS	Resists splash and spillage of aromatic and aliphatic hydrocarbon solvents and alcohols.
HEAT RESISTANCE	Up to 120°C dry heat	WATER	Excellent resistance to fresh and salt water
SALTS	Unaffected by splash and spillage of neutral and alkaline salt solutions	ALKALIS	Excellent resistance to splash and spillage of most common alkalis
ACIDS	Suitable for splash and spillage of mild acids	ABRASION	Good when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	Epoxy zinc phosphate primer			APPLICATION CONDITIONS		
FINISH	Semi gloss			Air Temp.	Min 0°C	Max 40°C
COLOUR	Steel Grey			Substrate Temp.	0°C	40°C
				Relative Humidity	85%	
COMPONENTS	Two			COATING THICKNESS (MICRONS)		
VOLUME SOLIDS	62%			Wet film per coat (µm)	85	205
VOC LEVEL	<360 g/L			Dry film per coat (µm)	50	125
FLASH POINT	– 7°C					125
POT LIFE	6 hours (4 litre kit, 25°C)					75
MIXING RATIO V/V	Part A : 6	Part B : 1				
THINNER	920-08925	Dulux® Epoxy Thinner		SUITABLE SUBSTRATES	Abrasive blast cleaned steel	
PRODUCT CODE	410-H0347	Steel Grey		PRIMERS	Not applicable	
	976-82623	Hardener		TOPCOATS	Single and two pack Dulux® products	
				APPLICATION METHODS	Conventional spray, airless spray or air assisted spray.	

DRYING CHARACTERISTICS AT 75 µm DRY FILM THICKNESS* (STANDARD HARDENER)

OVERCOAT

Temperature	Humidity	Touch	Handle	Full Cure	Min	Max ¹
10° C	50%	2 Hours	8 Hours	5 Days	3 Hours	4 Weeks
15° C	50%	1 Hour	7 Hours	4 Days	2 Hours	4 Weeks
25° C	50%	1 Hour	4 – 6 Hours	4 Days	1.5 Hours	4 Weeks

*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying.

¹For best results, abrade surface before painting to ensure maximum intercoat adhesion.

SPREADING RATE
with Standard Hardener
assuming no losses

8.3 square metres per litre equals 75 µm dry film thickness

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.

DUREPON® FRX

TYPICAL SYSTEMS

This is a guide only and not to be used as a specification. Your specific project needs must be discussed with a Dulux Protective Coatings Consultant.

SURFACE	ENVIRONMENT	PREPARATION GUIDE	SYSTEM	DFT (µm)
STEEL – NEW	High corrosivity (AS2312.1 Cat C4) System PUR 3	Abrasive blast clean AS1627.4 Class 2.5	1 st Coat Durepon® FRX 2 nd Coat Duremax® GPE 3 rd Coat Weathermax® HBR	75 µm 125 µm 100 µm
STEEL – NEW	Severe Industrial Corrosivity (AS2312.1) System EVH4	Abrasive blast clean AS1627.4 Class 2.5	1 st Coat Durepon® FRX 2 nd Coat Duremax® HBE 3 rd Coat Duremax® HBE	75 µm 250 µm 250 µm
STEEL – NEW	Moderate Industrial (AS2312.1) System EHB3	Abrasive blast clean AS1627.4 Class 2.5	1 st Coat Durepon® FRX 2 nd Coat Duremax® HBE	75 µm 200 µm
STEEL – NEW	Low - Medium (AS2312.1 Cat C2-3) System PUR2	Abrasive blast clean AS1627.4 Class 2.5	1 st Coat Durepon® FRX 2 nd Coat Luxathane® HPX 3 rd Coat Luxathane® HPX (Optional)	75 µm 50 µm 50 µm

NOTE: If the application is by brush or roller, additional coats will be necessary to achieve the minimum DFT and full opacity

SURFACE PREPARATION	Steel: Round off all rough welds, sharp edges and remove weld spatter. Remove grease, oil and other contaminants in accordance with AS1627.1. Abrasive blast clean to a minimum of AS1627.4 Class 2.5.		
APPLICATION	Mix each can thoroughly using a power mixer until the contents are uniform. Mix the contents of both packs together thoroughly using a power mixer and allow to stand for 10 minutes. Remix thoroughly before application.		
BRUSH/ROLLER	Apply even coats of the mixed material to the prepared surface. Thin if necessary with up to 100 ml/litre with Duthin® 450 (920-81942) to aid application. When brushing and rolling additional coats may be required to attain the specified thickness.		
CONVENTIONAL SPRAY	Thin up to 100 ml/litre with Duthin® 450 (920-81942) to aid atomisation. At temperatures below 15°C, up to 150 ml/litre thinner may be required. Typical Set-up Graco AirPro 1.8mm (239543) Iwata W70 Gun: 021 Air Cap, 021 Fluid Needle, 021 Fluid Nozzle Pressure at Pot: 70-100 kPa (10-15 p.s.i.) Pressure at Gun: 380-410 kPa (55-60 p.s.i.)		
AIRLESS SPRAY	Standard airless spray equipment such as a Graco Xtreme 45:1 with a fluid tip of 17-21 thou (0.43 -0.53mm) and an air supply capable of delivering 550-690 kPa (80 -100 psi) at the pump. Ideally fluid hoses should not be less than 3/8" ID and not longer than 50 feet to obtain optimum results. Thinning is not normally required but up to 100 ml/litre of Duthin® 450 (920-81942) may be added to ease application.		
PRECAUTIONS	This is an industrial product designed for use by experienced Protective Coating applicators. Where conditions may require variation from the recommendations on this Product Data Sheet contact your nearest Dulux® Consultant for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the written consent of Dulux® Australia. Freshly mixed material must not be added to material that has been mixed for some time. The rate of cure is dependent upon temperature. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. In hot conditions above 30°C Dulux® Epoxy Thinner (920-08925) can be used in place of Duthin® 450 to improve application. Do not use on galvanised steel as delamination can occur.		
CLEAN UP	Clean all equipment with Duthin® 450 (920-81942) immediately after use.		
OVERCOATING	Degrease with Gamlen CA 1 according to the data sheet. Test adhesion of existing coating by standard cross hatch adhesion test. If the coating fails, remove it. High-pressure water wash at 8.3 to 10.3 MPa (1,200-1,500 p.s.i.) to remove chalk and dust. Abrade surface to provide a good key for the new coating. Epoxies must be abraded if recoated outside the recoat window.		
SAFETY PRECAUTIONS	Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEET is available from Customer Service (13 23 77) or www.duluxprotectivecoatings.com.au		
STORAGE	Store as required for a flammable liquid Class 3 in a bunded area under cover. Store in well-ventilated area away from sources of heat or ignition. Keep containers closed at all times.		
HANDLING	As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be avoided by good occupational work practice. Eye protection approved to AS1337 should be worn where there is a risk of splashes entering the eyes. Always wash hands before smoking, eating, drinking or using the toilet.		
USING	Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear combined organic vapour/particulate respirator. When spraying, users must comply with their respective State Spray Painting Regulations.		
FLAMMABILITY	This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE. Fight fire with foam, CO ₂ or dry chemical powder. On burning will emit toxic fumes.		
WELDING	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.		

COMPANY INFORMATION

Dulux Protective Coatings a division of

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PACKAGING, TRANSPORT AND STORAGE

PACKAGING	Available in 14 litre packs
TRANSPORTATION WEIGHT	1.44 kg/litre (Average of components)
DANGEROUS GOODS	Part A: Class 3 UN 1263 Part B: Class 3 UN 1263

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