

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 suitable primer for all kinds of steel fabrication in industries that require heavy-duty coatings, particularly when cure temperatures are low. It is useful as a tie-coat over inorganic zinc primers and will accept a wide range of topcoats (also self-recoatable) even after long weathering periods.
DUREPON[®] FRX is normally overcoated with epoxy, polyurethane or acrylic finishes depending upon end requirements. It provides such properties as excellent adhesion on blast-cleaned steel, excellent corrosion resistance and rapid dry times, with the ability to cure at temperatures down to 0°C.

SPECIFICATIONS AS/NZS 3750.13 Type 2

RESISTANCE GUIDE

| | | | |
|------------------------|--|-----------------|---|
| HEAT RESISTANCE | Up to 120°C dry heat. | ALKALIS | Excellent resistance to splash and spillage of most common alkalis. |
| WEATHERABILITY | Epoxy coatings may yellow with time. On exterior exposure some chalking may also occur. This will not detract from the protective properties of the coating. Use a weatherable topcoat if required for appearance. | SALTS | Unaffected by splash and spillage of neutral and alkaline salt solutions. |
| SOLVENTS | Resists splash and spillage of most hydrocarbon solvents, refined petroleum products and most common alcohols. | WATER | Excellent resistance to fresh and salt water. |
| ACIDS | Suitable for splash and spillage exposure to weak inorganic acids. | ABRASION | Good when fully cured. |

TYPICAL PROPERTIES AND APPLICATION DATA

| | | | | |
|---------------------------|---|-------------------------------|---|------|
| CLASSIFICATION | Epoxy zinc phosphate primer | APPLICATION CONDITIONS | Min | Max |
| FINISH | Semi Gloss | Air Temperature | 0°C | 45°C |
| COLOUR | Grey (Approximate match to AS2700 N12 Pastel Grey) | Substrate Surface Temperature | 0°C | 45°C |
| COMPONENTS | Two | Relative Humidity | | 85% |
| SOLIDS BY VOLUME | 62% | | | |
| VOC LEVEL | <360 g/L | | | |
| FLASH POINT | Pt A -7°C Pt B 27°C | | | |
| POT LIFE | 6 Hours (4L, 25°C) | | | |
| MIXING RATIO (V/V) | Part A : 6 Part B : 1 | | | |
| THINNER | 920-81942 DUTHIN [®] 450 | SUITABLE SUBSTRATES | Abrasives blast cleaned steel. | |
| Above 30°C | 920-08925 Dulux [®] Epoxy Thinner | TOPCOATS | Single and two pack products. | |
| PRODUCT CODE | 410-82619 Grey | APPLICATION METHODS | Brush, roller, conventional, airless spray or air assisted spray. | |
| | 976-82623 Hardener | | | |

Drying characteristics at 75 microns dry film thickness

| Temperature | Humidity | Touch | Handle | Full Cure | Overcoat | |
|-------------|----------|---------|-----------|-----------|-----------|------------|
| | | | | | Min | Max |
| 5° C | 50% | 2 Hours | 8 Hours | 5 Days | 3 Hours | Indefinite |
| 10° C | 50% | 1 Hour | 7 Hours | 4 Days | 2 Hours | Indefinite |
| 25° C | 50% | 1 Hour | 4-6 Hours | 4 Days | 1.5 Hours | Indefinite |

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

TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD

A spreading rate of 8.3 sq. metres per litre corresponds to 75 microns dry film thickness assuming no losses. Practical spreading rates will vary depending on such factors as method and conditions of application and surface roughness.

DUREPON® FRX

TYPICAL SYSTEMS

(The typical systems are offered as a guide only and are not to be used as a specification. It is recommended that the specific needs of a project be discussed with a Dulux Protective Coatings Consultant.)

| SURFACE | PREPARATION GUIDE | SYSTEM | | DRY FILM THICKNESS |
|---------|-----------------------------------|----------|--------------------------|--------------------|
| STEEL | Abrasive blast AS1627.4 Class 2.5 | 1st Coat | DUREPON® FRX | 75 Microns |
| | | 2nd Coat | DUREBILD® HSE | 200 Microns |
| | | 3rd Coat | DUREBILD® HSE (Optional) | 200 Microns |
| | | 1st Coat | DUREPON® FRX | 75 Microns |
| | | 2nd Coat | LUXATHANE® R | 50 Microns |
| | | 3rd Coat | LUXATHANE® R (Optional) | 50 Microns |

SURFACE PREPARATION Round off all rough welds, sharp edges and remove weld spatter. Remove grease, oil and other contaminants in accordance with AS1627.1. Rust, millscale, oxide deposits and old paint films on metal surfaces must be removed by abrasive blast cleaning to a minimum of AS1627.4 Class 2.5. Remove all dust by brushing or vacuum cleaning.

APPLICATION Stir each can thoroughly until the contents are uniform. Use of a power mixer is recommended. Mix the contents of both packs together thoroughly using a power mixer and allow to stand for 10 minutes (15 minutes below 15°C). Remix thoroughly before using.

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 ease 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

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| Graco Delta Gun: | 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 45:1 Xtreme 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® representative for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the express 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 as a primer over galvanised steel as delamination can occur.

CLEAN UP Clean all equipment with DUTHIN® 450 (920-81942) immediately after use.

OVERCOATING Aged coating should be tested for lifting by a method appropriate for the coating thickness, for example 'X' cut or cross-hatch methods. If it lifts, remove it. The surface must be free of oil, grease and other contaminants. High-pressure water wash at 8.3 to 10.3 MPa (1,200 – 1,500 p.s.i.) to remove loosely adhering chalk and dust. Abrasion may be required depending on surface condition.

SAFETY PRECAUTIONS **Read Data Sheet, Material Safety Data Sheet and any precautionary labels on containers.**

STORAGE Store as required for a flammable liquid Class 3 in a bonded 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 spray painting, users should comply with the provisions of the 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, CO₂ 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.

MATERIAL SAFETY DATA SHEET is available from Customer Service (132377) or www.duluxprotectivecoatings.com.au

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| PACKAGING | Available in 20 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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