ZINCANODE® 402 EXPRESS

Two Pack Zinc Rich Fast Drying Epoxy Primer — PC 132

FEATURES
- ZINC RICH EPOXY
- RAPID DRY AND OVERCOAT TIMES
- SUITABLE FOR USE IN MULTICOAT SYSTEMS WHEN TOPCOATED WITH EPOXIES AND POLYURETHANES

USES

ZINCANODE® 402 EXPRESS is a two-pack epoxy zinc rich primer formulated for corrosion resistance in harsh corrosive environments. ZINCANODE® 402 EXPRESS is recommended for use over abrasive blast cleaned steel surfaces.

ZINCANODE® 402 EXPRESS offers ease of application with no signs of mud-cracking at stated maximum film build. This product can be utilised in commercial construction, industrial and coastal settings, such as bulk handling equipment, mining applications, bridges, and tanks. It is also suitable for repair and maintenance purpose.

SPECIFICATIONS
- Tested in accordance with AS 4100-1998 – Steel Structures Appendix J – Standard Test for Evaluation of Slip Factor.
- Conforms to APAS 0014/2.

Refer to a Dulux Protective Coatings Consultant for more details.

RESISTANCE GUIDE

WEATHERABILITY	For optimal corrosion protection this product is intended for use as part of a multicoat system. Weathering performance will be dependent on the relevant topcoat.	**SOLVENTS**	Good resistance to 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 when suitably topcoated.
SALTS	Excellent resistance to neutral and alkaline salts when suitably topcoated.	**ALKALIS**	Not recommended for alkaline conditions unless suitably topcoated.
ACIDS	Not recommended for acid conditions.	**ABRASION**	Very good when fully cured.

TYPICAL PROPERTIES AND APPLICATION DATA (QUICKTURN® HARDENER)

CLASSIFICATION	Zinc Rich Epoxy Primer
FINISH	Matt
COLOUR	Green-Grey, Grey
COMPONENTS	Two
VOLUME SOLIDS	50% ± 2
VOC LEVEL	<460 g/L
FLASH POINT	32°C
POT/SPRAY LIFE	4 hours (15 litre kit, 25°C)
MIXING RATIO V/V	Part A : 4 Part B : 1
THINNER	920-08925 Dulux® Epoxy Thinner
PRODUCT CODE	730-H0451 Part A – Green Grey 730-H0466 Part A – Grey 976-H0482 Standard Hardener 976-H0482 Quickturn® Hardener

APPLICATION CONDITIONS

	Min	Max
Air Temp.	5°C	40°C
Substrate Temp.	5°C	40°C
Relative Humidity		85%

COATING THICKNESS (MICRONS)

	Min	Max	Recommended
Wet film per coat (µm)	120	250	150
Dry film per coat (µm)	60	125	75

SUITABLE SUBSTRATES	Suitably prepared substrates including blast-cleaned steel.
PRIMERS	Not applicable.
TOPCOATS	Most Dulux® Protective Coatings topcoats.
APPLICATION METHODS	Conventional, or airless spray. Brush and roller for touch-ups, and small areas only.

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

					OVERCOAT	
Temperature	**Humidity**	**Touch**	**Handle**	**Full Cure**	**Min**	**Max[1]**
5° C	50%	40 Minutes	6 Hours	7 Days	6 Hours	4 Weeks
15° C	50%	20 Minutes	4 Hours	7 Days	4 Hours	4 Weeks
25° C	50%	10 Minutes	2 Hours	7 Days	2 Hours	4 Weeks

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

[1] If the maximum recoat window of has been exceeded prior to being coated over, contact your Dulux® Protective Coatings Consultant or Dulux® Protective Coatings Technical Serive for surface preparation recommendations.

SPREADING RATE
with Quickturn® Hardener
assuming no losses

6.7 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.

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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	Very high corrosivity (AS2312.1 Cat C5) System PUR5	Abrasive blast clean AS1627.4 Class 2.5	1st Coat Zincanode® 402 2nd Coat Duremax® MBE 3rd Coat Weathermax® HBR	75 µm 200 µm 100 µm
STEEL – NEW	Very high corrosivity (AS2312.1 Cat C5) Exceeds System PUR5	Abrasive blast clean AS1627.4 Class 2.5	1st Coat Zincanode® 402 2nd Coat Duremax® GPE MIO 3rd Coat Quantum® FX 4th Coat Quantum® Clearcoat	75 µm 200 µm 55 µm 45 µm
STEEL – NEW	Very high corrosivity (AS2312.1 Cat C5) Exceeds System PUR5	Abrasive blast clean AS1627.4 Class 2.5	1st Coat Zincanode® 402 2nd Coat Duremax® GPE MIO 3rd Coat QUANTUM® 221 4th Coat QUANTUM® 221	75 µm 200 µm 50 µm 50 µm
STEEL – NEW	Very high corrosivity (AS2312.1 Cat C5) System PUR4	Abrasive blast clean AS1627.4 Class 2.5	1st Coat Zincanode® 402 2nd Coat Duremax® GPE 3rd Coat Weathermax® HBR	75 µm 125 µm 100 µm
STEEL – NEW	Very high corrosivity (AS2312.1 Cat C5) System PUR4	Abrasive blast clean AS1627.4 Class 2.5	1st Coat Zincanode® 402 2nd Coat Duremax® GPE 3rd Coat Luxathane® HPX	75 µm 125 µm 50 µm
STEEL – NEW	Very high corrosivity (AS2312 Cat C5)	Abrasive blast clean AS1627.4 Class 2.5	1st Coat Zincanode® 402 2nd Coat Ferreko® No. 3 3rd Coat Ferreko® No. 3	75 µm 100 µm 100 µm
STEEL – NEW	Low–medium corrosivity (AS2312.1 Cat C2-3) System PUR 2a	Abrasive blast clean AS1627.4 Class 2.5	1st Coat Zincanode® 402 2nd Coat Luxathane® HPX	75 µm 50 µm

NOTE: If 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. Degrease with Gamlen CA 1 (a free-rinsing, alkaline detergent) according to the manufacturer's written instructions and all safety warnings. Abrasive blast clean to a minimum of AS1627.4 Class 2.5 with a blast profile of 40 – 70 microns. Remove all dust brushing or vacuum.

APPLICATION

Mix each can thoroughly using a power mixer until the contents are uniform. Mix the contents of both packs together thoroughly with a power mixer. Ensure clean-up solvent, Dulux® Epoxy Thinner (920-08925), is available. Remix thoroughly before and during application.

APPLICATION EQUIPMENT

Airless Spray: Graco K60FH2 spray pump or equivalent**. Graco XTR 7** spray gun or equivalent. Thinning is not normally required but up to 50 ml/litre or 5% of Dulux® Epoxy Thinner (920-08925) may be added to aid application. Apply in multiple wet coats overlapping each pass by 50%.

Tip Orifice	Atomising Pressure	Mat'l Hose ID	Pump Manifold Filter
0.017" – 0.021" (430 - 533 microns)	2,700 – 3,200 psi (186 – 221 bar)	3/8" (9.525mm)	None

NOTE: A 2 metre x ¼" (6.35mm) whip hose is allowed at the end of the material hose for greater ease of application. A dedicated material line for use with this product is recommended.

Air Spray: Graco Triton 308 or equivalent**.** Thinning is not normally required but up to 100 ml/litre or 10% of Dulux® Epoxy Thinner (920-08925) may be added to aid application. Apply in multiple wet coats overlapping each pass by 50%.

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomising Pressure	Material Pressure
Graco Air Pro or Equivalent	1.8mm (0.070)	Graco 192318	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	60 to 70 PSI (4.14 – 4.83 Bar)	15to 25 PSI (1.03 – 1.72 Bar)

NOTE: Low temperatures and/or long hose lengths require higher material pressure.

Roller: Thin 10% to 15% with Dulux® Epoxy Thinner (920-08925). Recommended for small touch-up areas only. If appearance is important, do not brush or roll. There will be noticeable differences in visual appearance between different application methods. Use 10 to 12 mm synthetic woven nap shed resistant covers. Note: Two or more coats may be required to obtain recommended film thicknesses.

Brush: Thin 10% to 15% with Dulux® Epoxy Thinner (920-08925). Recommended for small touch-up areas only. If appearance is important, do not brush or roll. There will be noticeable differences in visual appearance between different application methods. Use high-quality natural or synthetic bristle brushes. Note: Two or more coats may be required to obtain recommended film thicknesses.

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PRECAUTIONS	This is an industrial product designed for use by experienced Protective Coating applicators. Ensure that you read and understand the safety precautions on the relevant Technical Data Sheet, and Material Safety Data Sheets before applying the product. The surface to be coated must be free of moisture and contaminants. Do not apply at temperatures below 5°C. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. The rate of cure is dependent upon temperature. Where application conditions are outside the parameters stated in this Technical Data Sheet, or where any variation to the recommendations within this document are sought, contact your Dulux® Protective Coatings Consultant for written consent or specifications prior to application. Freshly mixed material must not be added to previously mixed material. DO NOT apply coatings of a saponifiable nature such as alkyds directly to this zinc rich product.
CLEAN UP	Clean all equipment with Dulux® Epoxy Thinner (920-08925) immediately after use.
OVERCOATING	If the maximum recoat window of has been exceeded prior to being coated over, contact your Dulux® Protective Coatings Consultant or Dulux® Protective Coatings Technical Serive for surface preparation recommendations.
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. Contents of container may be under pressure.
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	Protect the open can from exposure to water. Water will react with metallic zinc to generate a flammable gas. This may build enough pressure in a resealed can to rupture the lid. Containers should be carefully opened by first placing a rag, then a hand, over the lid then gently easing the lid off. 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 is a division of:

DuluxGroup (Australia) Pty Ltd
1956 Dandenong Road, Clayton 3168
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DuluxGroup (New Zealand) Pty Ltd
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PACKAGING, TRANSPORT AND STORAGE

PACKAGING	Available in 10 litre packs
TRANSPORTATION WEIGHT	2.28 kg/litre (Average of components)
DANGEROUS GOODS	Part A: Class 9 UN 3082 Part B: Class 3 UN 1263

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