

ZINCANODE® 402

Two Pack Zinc Rich Epoxy Primer

PC 122

- FEATURES**
- ECONOMICAL ZINC RICH EPOXY
 - RAPID DRY AND OVERCOAT TIMES
 - EASY TO TOPCOAT WITH EPOXIES, POLYURETHANES, AND CHLORINATED RUBBERS
 - SUITABLE FOR USE IN ENVIRONMENTS UP TO 200°C
 - PROVIDES EXCELLENT CORROSION PROTECTION

USES ZINCANODE® 402 is a two-pack epoxy zinc rich primer formulated for exceptional cathodic corrosion resistance in harsh corrosive environments. ZINCANODE® 402 is recommended for use over abrasive blast cleaned steel surfaces, especially where overcoating is required without special mist or seal coat techniques.

ZINCANODE® 402 offers ease of application, high film builds without mud-cracking and exceptional adhesion to field weld areas cleaned by power sanding or power wire brushing. It is specified for use in power generation plants, bulk handling equipment and oil refineries. Also in mining and chemical processes, offshore structures and exposed pipelines.

- SPECIFICATIONS**
- APAS 2916/1 - assessed and confirmed to meet all requirements on specific certified products.
 - AS/NZS 3750-9 Type 2
 - Certificate of test to AS/NZS 1530.3:1999 available for a specific system
 - Tested in accordance with AS 4100-1998 – Steel Structures Appendix J – Standard Test for Evaluation of Slip Factor
- Refer to a Dulux Protective Coatings Consultant for more details.

RESISTANCE GUIDE

WEATHERABILITY	Epoxy coatings 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	Good resistance to splash and spillage of aromatic and aliphatic hydrocarbon solvents and alcohols
HEAT RESISTANCE	Up to 200°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 (STANDARD HARDENER)

CLASSIFICATION	Zinc Rich Epoxy Primer	APPLICATION CONDITIONS			
FINISH	Matt		Min	Max	
COLOUR	Grey and Green-Grey	Air Temp.	10°C	40°C	
		Substrate Temp.	10°C	40°C	
		Relative Humidity		85%	
COMPONENTS	Two	COATING THICKNESS (MICRONS)			
VOLUME SOLIDS	48%		Min	Max	Recommended
VOC LEVEL	<460 g/L	Wet film per coat (µm)	125	190	160
FLASH POINT	32°C	Dry film per coat (µm)	60	90	75
POT LIFE	8 hours (4 litre kit, 25°C)	SUITABLE SUBSTRATES	Abrasive blast cleaned steel		
MIXING RATIO V/V	Part A : 4 Part B : 1	PRIMERS	Not applicable		
THINNER	920-08925 Dulux® Epoxy Thinner	TOPCOATS	Most Dulux® Protective Coatings topcoats		
PRODUCT CODE	730-81386 Part A – Green Grey 730-H0021 Part A – Grey 976-63033 Standard Hardener 976-H0114 Cold Cure Hardener	APPLICATION METHODS	Conventional, airless spray or air assisted spray. Brush and roller only practical for small areas.		

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

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT	
					Min	Max ¹
10° C	50%	2 Hours	17 Hours	7 Days	17 Hours	4 Weeks
15° C	50%	2 Hours	10 Hours	7 Days	10 Hours	4 Weeks
25° C	50%	1 Hour	5 Hours	7 Days	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.

¹If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion.

SPREADING RATE **6.4 square metres per litre equals 75 µm dry film thickness**
with Standard Hardener
assuming no losses
NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.

ZINCANODE® 402

COLD CURE HARDENER

COATING THICKNESS (MICRONS)

	Min	Max	Recommended
Wet film per coat (µm)	125	190	160
Dry film per coat (µm)	60	90	75

APPLICATION CONDITIONS

	Min	Max
Air Temperature	5°C	30°C
Substrate Surface Temperature	5°C	30°C
Relative Humidity		85%

SOLIDS BY VOLUME	48%
VOC LEVEL	<460 g/L
POT LIFE	8 hours (4 litre kit, 25°C)

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

OVERCOAT

Temperature	Humidity	Touch	Handle	Full Cure	Min	Max ¹
10° C	50%	60 mins	8 Hours	7 Days	8 Hours	4 Weeks
25° C	50%	30 mins	4 Hours	7 Days	4 Hours	4 Weeks

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

¹If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion

Use of fast or low temperature hardeners may result in increased yellowing and a reduction of gloss level

SPREADING RATE

with Fast Cure Hardener
assuming no losses

6.4 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.

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	1 st Coat Zincanode® 402 2 nd Coat Duremax® GPE 3 rd 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	1 st Coat Zincanode® 402 2 nd Coat Duremax® GPE MIO 3 rd Coat Quantum® FX 4 th 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	1 st Coat Zincanode® 402 2 nd Coat Duremax® GPE MIO 3 rd Coat QUANTUM® 221 4 th 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	1 st Coat Zincanode® 402 2 nd Coat Duremax® GPE 3 rd 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	1 st Coat Zincanode® 402 2 nd Coat Duremax® GPE 3 rd 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	1 st Coat Zincanode® 402 2 nd Coat Ferreko® No. 3 3 rd 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	1 st Coat Zincanode® 402 2 nd 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

ZINCANODE® 402

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 and let stand for 10 minutes. Ensure clean-up solvent (Dulux® Epoxy Thinner) is available. Remix thoroughly before and during application
BRUSH/ROLLER	For small areas only. Apply even coats of the mixed material to the prepared surface. Thinning is not normally required, however, up to 50 ml/litre of Dulux® Epoxy Thinner (920-08925) can be added to aid application. When brushing and rolling additional coats may be required to attain the specified thickness.
CONVENTIONAL SPRAY	Thinning is not normally required, however, up to 50ml/litre of Dulux® Epoxy Thinner (920-08925) can be added to ease application. Ensure paint is regularly agitated during application to prevent settling. Typical Set-up Graco AirPro: 1.8mm (239543) Pressure at Triton 308: 70-105 kPa (10-15 p.s.i.) Pressure at Gun: 380-415 kPa (55-60 p.s.i.)
AIRLESS SPRAY	Standard airless spray equipment such as a Graco Xtreme 45:1 with a fluid tip of 15-17 thou (0.38-0.43mm) and an air supply capable of delivering 550-690 kPa (80-100 p.s.i.) at the pump. Ensure paint is regularly agitated during application to prevent settling. Thinning is not normally required but up to 50 ml/litre of Dulux® Epoxy Thinner (920-08925) may be added to aid application
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 Material Safety Data Sheets before using. The surface to be coated must be totally free of moisture and contaminants. Do not apply at temperatures below 10°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 Product Data Sheet, or where any variation to the recommendations within this document are sought, contact your Dulux® 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	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. 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	Contents of container may be under pressure. 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		PACKAGING, TRANSPORT AND STORAGE	
Dulux Protective Coatings a division of		PACKAGING	Available in 4 litre and 10 litre packs
DuluxGroup (Australia) Pty Ltd 1956 Dandenong Road, Clayton 3168 A.B.N. 67 000 049 427	DuluxGroup (New Zealand) Pty Ltd 150 Hutt Park Road, Lower Hutt, NZ A.B.N. 55 133 404 118	TRANSPORTATION WEIGHT	2.12 kg/litre (Average of components)
		DAANGEROUS GOODS	Part A: Class 3 UN 1263 Part B: Class 3 UN 1263

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