EPIGLOSS® 4 FINISH

Epoxy Gloss Finish — PC 223

FEATURES
- WITHSTANDS SEVERE CHEMICAL AND MARINE EXPOSURES
- TOUGH, ABRASION RESISTANT FINISH
- SUITABLE FOR CONTACT WITH FOODSTUFFS
- HIGH GLOSS FINISH

USES EPIGLOSS® 4 Finish provides a high gloss, easily maintained surface in areas of high abuse and under aggressive chemical exposure. It is recommended for the protection of plant in most chemical, industrial and petrochemical environments including alumina refineries, paper mills, oil refineries, food and beverage plants, abattoirs and canneries.

EPIGLOSS® 4 Finish is also a versatile maintenance coating for machinery, process equipment, canteens and amenity blocks and laboratories. For information on suitability for use as a food contact surface, refer to your Dulux® Protective Coatings Representative.

SPECIFICATIONS AS/NZS 3750.10

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 most hydrocarbon solvents, refined petroleum products and most common alcohols
HEAT RESISTANCE	Up to 120°C dry heat	**WATER**	Excellent resistance to fresh and salt water but not recommended for immersion (see precautions)
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 exposure to weak solutions of inorganic acids.	**ABRASION**	Excellent when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	Two pack epoxy gloss finish
FINISH	High Gloss
COLOUR	White and MTO factory made colours
COMPONENTS	Two
VOLUME SOLIDS	50% (White)
VOC LEVEL	<440 g/L (White)
FLASH POINT	>23°C
POT LIFE	8 hours (4 litre kit, 25°C)
MIXING RATIO V/V	Part A : 2 Part B : 1
THINNER	920-08925 Dulux® Epoxy Thinner
PRODUCT CODE	732-89893 White 976-89894 Hardener

APPLICATION CONDITIONS

	Min	Max
Air Temp.	10°C	40°C
Substrate Temp.	10°C	40°C
Relative Humidity		85%
Concrete Moisture		<6%

COATING THICKNESS (MICRONS)

	Min	Max	Recommended
Wet film per coat (µm)	80	150	100
Dry film per coat (µm)	40	75	50

SUITABLE SUBSTRATES	Suitably primed steel, aluminium, galvanised steel, concrete and MDF
PRIMERS	Most Dulux® two pack primers.
TOPCOATS	Not applicable
APPLICATION METHODS	Brush, roller, conventional, airless spray, air assisted spray or HVLP

DRYING CHARACTERISTICS AT 50 µm DRY FILM THICKNESS*

					OVERCOAT	
Temperature	**Humidity**	**Touch**	**Handle**	**Full Cure**	**Min**	**Max[1]**
10° C	50%	8 Hours	22 Hours	7 Days	22 Hours	3 Days
15° C	50%	5 Hours	12 Hours	7 Days	12 Hours	2 Days
25° C	50%	2 Hours	7 Hours	7 Days	8 Hours	2 Days

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

SPREADING RATE ASSUMING NO LOSSES

10.0 square metres per litre equals 50 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	Internal chemical	Abrasive blast clean AS1627.4 Class 2.5	1st Coat 2nd Coat 3rd Coat	Zincanode® 402 Epigloss® 4 Finish Epigloss® 4 Finish	75 µm 50 µm 50 µm
STEEL – NEW	Internal chemical	Abrasive blast clean AS1627.4 Class 2.5	1st Coat 2nd Coat 3rd Coat	Durepon® P14 Epigloss® 4 Finish Epigloss® 4 Finish	75 µm 50 µm 50 µm
CONCRETE	Interior	Remove release agents and other surface contaminants	1st Coat 2nd Coat 3rd Coat	Durebild® STE (thin 5-10%) Epigloss® 4 Finish Epigloss® 4 Finish	125 µm 50 µm 50 µm
HARDWOOD & MDF	Interior	Sand and dust down before and after first coat.	1st Coat 2nd Coat 3rd Coat	Luxepoxy® 4 White Primer Epigloss® 4 Finish Epigloss® 4 Finish	50 µm 50 µm 50 µm
ALUMINIUM	Interior	Clean, degrease and abrade surface	1st Coat 2nd Coat 3rd Coat	Luxepoxy® 4 White Primer Epigloss® 4 Finish Epigloss® 4 Finish	50 µm 50 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

Specifiers should follow the surface preparation guidelines from the data sheet for the primer or first coat selected. The surface must be clean, sound and free from moisture, grease, oil, dirt, rust, loose paint, and other contaminants. Degrease surface with Gamlen CA 1 detergent (according to the manufacturer's written instructions and all safety warnings) and then abrade to provide a key for the coating system. If application of the second coat has exceeded the recoat window of the first coat (refer to data sheet) then the entire surface MUST be abraded.

APPLICATION

USE ONLY EPIGLOSS® 4 FINISH HARDENER (976-89894). Check hardener cans before use.
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. Remix thoroughly before application.

BRUSH/ROLLER

Apply even coats of the mixed material to the prepared surface. Thin if necessary with up to 50 ml/litre Dulux® Epoxy Thinner (920-08925) to aid application. Additional coats may be required to attain the specified thickness.

CONVENTIONAL SPRAY

Thin up to 100ml/litre with Dulux® Epoxy Thinner (920-08925) to aid atomisation.

Typical Set-up	Graco AirPro:	1.4mm (239542)
	Pressure at Triton 308:	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 30:1 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. 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. Where conditions may require variation from the recommendations on this Product Data Sheet contact your Dulux® Consultant 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 if surface/coating temperature will fall below 10°C during the drying period. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. The coating MUST be fully cured and solvent free prior to being placed in service. Due to variations in construction and chemical environments, Epigloss® 4 Finish is not recommended for use on swimming pools or water immersion.

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.

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.

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CHEMICAL RESISTANCE

The resistance table below is a guide to the performance of fully cured EPIGLOSS® 4 Finish when applied according to specifications.

CHEMICAL	PERMANENT EXPOSURE	INTERMITTENT EXPOSURE
SOLVENTS		
Aviation gasoline	Excellent	Excellent
Ind. Methylated Spirits	Excellent	Excellent
Acetone	Fair	Satisfactory
Amyl acetate	Fair	Satisfactory
Benzene	Excellent	Excellent
Butyl acetate	Excellent	Excellent
Butyl alcohol	Excellent	Excellent
Cellosolve	Fair	Excellent
Cyclohexanol	Fair	Excellent
Diacetone alcohol	Fair	Satisfactory
Dibutyl phthalate	Excellent	Excellent
Ethyl acetate	Fair	Satisfactory
Ethanol	Excellent	Excellent
Ethylene diamine	Poor	Poor
Ethylene glycol	Excellent	Excellent
Heptane	Excellent	Excellent
Methyl ethyl ketone	Poor	Satisfactory
Methanol	Fair	Excellent
Methylene chloride	Poor	Poor
Propane	Excellent	Excellent
Solvent naphtha	Excellent	Excellent
Toluene	Excellent	Excellent
Trichloroethylene	Fair	Excellent
White spirit	Excellent	Excellent
Xylene	Excellent	Excellent
Styrene Monomer	Excellent	Excellent
Vinyl acetate monomer	Poor	Poor
ALKALI & SALTS		
Caustic Soda 5%	Excellent	Excellent
Caustic Soda 5% Hot	Excellent	Excellent
Caustic Soda 40%	Excellent	Excellent
Ammonia	Poor	Fair
Common Salt 5%	Excellent	Excellent
Common Salt 5% 100°C	Satisfactory	Excellent
Sodium carbonate	Excellent	Excellent
Sodium hypochlorite	Satisfactory	Excellent
Bleaching liquid	Satisfactory	Excellent
Acetic acid glacial	Poor	Poor
Chromic acid 25%	Poor	Satisfactory
Citric acid 10%	Excellent	Excellent
Formic acid 40%	Poor	Poor
Lactic acid 10%	Poor	Poor
Naphthenic acid	Excellent	Excellent

CHEMICAL	PERMANENT EXPOSURE	INTERMITTENT EXPOSURE
ACIDS		
Nitric acid 5%	Excellent	Excellent
Nitric acid 10%	Fair	Satisfactory
Sulphuric acid 10%	Satisfactory	Satisfactory
Sulphuric acid 50%	Poor	Satisfactory
Hydrochloric acid 20%	Satisfactory	Excellent
Hydrochloric acid conc.	Poor	Satisfactory
Phosphoric acid 20%	Fair	Excellent
Acetic acid 20%	Satisfactory	Excellent
Acetic acid 50%	Satisfactory	Excellent
Acetic acid glacial	Poor	Poor
Chromic acid 25%	Poor	Satisfactory
Citric acid 10%	Excellent	Excellent
Formic acid 40%	Poor	Poor
Lactic acid 10%	Poor	Poor
Naphthenic acid	Excellent	Excellent
OILS & FATS		
Lubricating oil	Excellent	Excellent
Diesel Oil	Excellent	Excellent
Crude oil	Excellent	Excellent
Raw linseed oil	Excellent	Excellent
Coconut oil	Excellent	Excellent
Caster oil	Excellent	Excellent
Peanut oil	Excellent	Excellent
Palm oil	Excellent	Excellent
Soybean oil	Excellent	Excellent
Fatty acids	Poor	Fair
DETERGENTS		
Teepol	Poor	Excellent
Detergent Alkylate	Excellent	Excellent
MISCELLANEOUS		
Butadiene	Excellent	Excellent
Bromine	Poor	Poor
Creosote	Poor	Poor
Cresylic acid	Poor	Poor
Formaldehyde 40%	Poor	Fair
Glycerine	Excellent	Excellent
P.V.A. latex	Fair	Excellent
Ethylene Diamine	Poor	Fair
Diethylene triamine	Poor	Fair
Phenol (liquid)	Poor	Fair

COMPANY INFORMATION

Dulux Protective Coatings a division of

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

PACKAGING, TRANSPORT AND STORAGE

PACKAGING	Available in 6 litre packs
TRANSPORTATION WEIGHT	1.26 kg/litre (Average of components)
DANGEROUS GOODS	Part A: Class 3 UN 1263 Part B: Class 3 UN 1263