

LUXEPOXY[®] STL

Solventless Epoxy Tank Lining

PC 246

- FEATURES**
- CAN BE APPLIED TO 500 MICRONS IN A SINGLE APPLICATION
 - SOLVENT FREE – NO THINNING REQUIRED

USES LUXEPOXY[®] STL is formulated specifically for application to steel and concrete substrates designed for the storage of water. Unlike many solventless epoxies, its unique curing mechanism substantially reduces blooming and subsequently allows for easy recoating under cold conditions. It's solvent free properties mean that it is safer for both the applicator and environment during application. If so desired, can be used for any application where a high build epoxy is required.

SPECIFICATIONS

RESISTANCE GUIDE

HEAT RESISTANCE	Up to 120°C dry heat, 50°C-water immersion.	ALKALIS	Suitable for immersion in concentrated solutions 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.	OILS & FATS	Suitable for immersion in mineral and vegetable oils and fats excepting for prolonged contact with fatty acids
SOLVENTS	Suitable for immersion in aromatic and aliphatic hydrocarbons and refined petroleum products.	SALTS	Suitable for immersion in most salt solutions.
ACIDS	Suitable for immersion in weak solutions of mineral acids.	WATER	Excellent resistance to immersion in fresh and salt water.
		ABRASION	Excellent resistance when fully cured.

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	Solventless epoxy tank lining		APPLICATION CONDITIONS	Min	Max	
FINISH	Gloss		Air Temperature	10°C	45°C	
COLOUR	White		Substrate Surface Temperature	10°C	45°C	
COMPONENTS	Two		Relative Humidity		85%	
SOLIDS BY VOLUME	100% (White)		Concrete Moisture Content		<10%	
VOC LEVEL	<10 g/L (White)			Min	Max	Recom.
FLASH POINT	Above 65°C		Wet film per coat (microns)	200	500	250
POT LIFE	30 Minutes (20L, 25°C)		Dry film per coat (microns)	200	500	250
MIXING RATIO (V/V)	Part A : 2	Part B : 1				
THINNER	Spray	Do not thin	SUITABLE SUBSTRATES	Blast cleaned steel and prepared concrete.		
	Clean up	920-08925 Dulux [®] Epoxy Thinner	APPLICATION METHODS	Airless spray.		
PRODUCT CODE	742-81469	White (MTO Only)				
	976-84530	Hardener				

Drying characteristics at 350 microns dry film thickness

Temperature	Humidity	Touch	Handle	Full Cure	Overcoat	
					Min	Max
10° C	50%	11 Hours	20 Hours	7 Days	20 Hours	72 Hours
15° C	50%	7 Hours	13 Hours	7 Days	13 Hours	48 Hours
25° C	50%	4 Hours	8 Hours	7 Days	8 Hours	48 Hours

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

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

Refer to PRECAUTIONS section for immersion service requirements.

TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD

A spreading rate of 2.8 sq. metres per litre corresponds to 350 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.

LUXEPOXY® STL

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 3 with a 75-100 micron profile.	1st Coat	LUXEPOXY® STL	250 Microns
		2nd Coat	LUXEPOXY® STL	250 Microns
		1st Coat	LUXEPOXY® STL	500 Microns
CONCRETE	Clean surface to remove contaminants. Diamond grind, track or light-shot blast. Remove dust.	1st Coat	LUXEPOXY® STL	250 Microns
		2nd Coat	LUXEPOXY® STL	250 Microns
		1st Coat	LUXEPOXY® STL	500 Microns

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. Rinse surface thoroughly with clean potable water to remove acid or alkali contaminants. Immersed steel must be prepared to AS1627.4 Class 3 with a suitable blast media to a surface profile of 75-100 microns. Remove all dust by brushing or vacuum cleaning.

Concrete: Remove all laitance, form release, curing compounds, oil, grease and other surface contaminants. Diamond grind, track or light shot-blast to provide suitable profile. Remove all dust by vacuum cleaning. Fill any large voids exposed using Luxepoxy Filler. Cement based substrates should be at least 21 days old before coating.

APPLICATION

Stir each can thoroughly until the contents are uniform. Use of a power mixer recommended. Mix the contents of both packs together thoroughly using a power mixer immediately prior to use. Use without further delay. **Ensure the clean-up solvent is available before commencing application.**

BRUSH/ROLLER

Suitable for small areas only such as rivets and seams. When brushing and rolling additional coats may be required to attain the specified thickness.

CONVENTIONAL SPRAY

Not recommended.

AIRLESS SPRAY

PLURAL COMPONENT AIRLESS UNITS:

Units capable of 2:1 volume metering and heating such as a Graco 45:1 or 56:1 Xtreme Mix with a fluid tip of 27-31 thou (0.68-0.79mm) 3/4 Twist tip or adjustable tip (Titan) and an air supply capable of delivering 690-830 kPa (100 -120 psi) at the pump and a line size of 12mm ID.

PREMIX AIRLESS APPLICATION:

Standard airless spray equipment such as a Graco 68:1 Xtreme with a fluid tip of 27-31 thou (0.68-0.79mm) or adjustable tip and an air supply capable of delivering 690-830 kPa (100-120 psi) at the pump and a line size of 12mm ID. Apply material immediately after mixing and clean equipment immediately after use.

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 temperatures below 10°C. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. Concrete tanks will need to be emptied in advance of coating application to allow the moisture content of the concrete to fall below the maximum of 12%. After the coating has cured, check for defects in the coating in accordance with AS 3891.4, and repair. Do not apply over waterproofing compounds. The coating MUST be fully cured prior to being placed under immersion conditions. This material MUST NOT be thinned.

CLEAN UP

Clean all equipment with Dulux® Epoxy Thinner (920-08925) 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. If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion. Within 48 hours at 25°C: Thoroughly solvent wash with Epoxy Thinner, allow the solvent to flash off and apply LUXEPOXY® STL to the prepared area, overlapping sound coating by 70-100mm.

REPAIR

After 48 hours at 25°C: Sweep blast or abrade by hand (Grade 150 or coarser) and then solvent wash using Epoxy Thinner for areas of low film build or pin holes. Apply LUXEPOXY® STL to the prepared area, overlapping sound coating by 70-100mm.

SAFETY PRECAUTIONS

Read Data Sheet, Safety Data Sheet and any precautionary labels on containers.

STORAGE HANDLING

Store in a bonded area under cover.

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 WELDING

Fight fire with foam, CO₂ or dry chemical powder. On burning will emit toxic fumes.

Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.

SAFETY DATA SHEET is available from Dulux Customer Service (Australia 132 377 or New Zealand 0800 800 424)

www.duluxprotectivecoatings.com.au

Dulux Protective Coatings a division of		PACKAGING	Available in 20 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	1.25 kg/litre (Average of components)
Dulux, and Luxepoxy are registered trade marks of DuluxGroup (Australia) Pty Ltd.		DANGEROUS GOODS	Part A: Non Dangerous Goods Part B: Class 8 UN 2735

Any advice, recommendation, information, assistance or service provided by DULUX Australia in relation to goods manufactured by it or their use and application is given in good faith and is believed by Dulux to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by Dulux is provided without liability or responsibility PROVIDED THAT the foregoing shall not exclude, limit, restrict or modify the right entitlements and remedies conferred upon any person or the liabilities imposed upon Dulux by any condition or warranty implied by Commonwealth, State or Territory Act or ordinance void or prohibiting such exclusion limitation or modification. Products can be expected to perform as indicated in this sheet so long as applications and application procedures are as recommended. Specific advice should be sought from Dulux for application in coastal areas and for large projects to ensure proper performance.