

**Betu Group Pty Ltd** Unit 17 / 14 Loyalty Road, North Rocks, NSW 2151 Email: sales2betu@gmail.com Phone: 0470 268 112 **BETU** Website: www.betu.com.au

# DATA SHEET PREMIUM TINTED EPOXY **100% SOLIDS, LOW VOC**

## DESCRIPTION

Premium Tinted Epoxy is a 100% solids, two-part cycloaliphatic amine cured epoxy resin. Premium Tinted Epoxy is designed as a stand-alone system or as a binder for slip-resistant surfaces. The finish is a high gloss, self-leveling, and colour stable.

It has exceptional resistance to a wide variety of chemicals and vapours making this product ideal for use in high traffic commercial and heavy industrial environments.

## **PRODUCT INFORMATION**

Pot Life Shelf Life Mixing Coverage	30-45 minutes at 25°C. 2 years. Store in a cool, dry area and out of direct sunlight (3:1) 3 Parts (Part A) : 1 Part (Part B) 3-8m2/L depending on the system, method of application, and porosity of the surface.	RECOM Mea War Min Fac faci Loa Car Foo Che ind Lab Exh War We Gov faci Res
Heat Resistance Clean Up	Epoxy will not begin to soften until 90°C. Clean tools with Epoxy Thinners while still wet and discard rollers and brushes	
Return to Service	Light Foot Traffic: 24 hours after completion of the job. Vehicle Traffic: 24-48 hours after the completion of the job. Sure Hardness: 72 hours after the completion of the job. Full Chemical Cure: 7 days after the completion of the job.	
Recoat Time Work Time Per Pack Tack Free Time	12-24 hours at 25°C 0.5 hours 8 hours at 25°C	

#### MMENDED USES

- echanical workshops and arehouses
- ning construction
- ctories and manufacturing cilities
- ading bays and ramps
- r parks
- od processing plants
- emical and pharmaceutical dustries
- boratories
- hibition halls and showrooms.
- ashrooms and cloakrooms
- et and dry processing areas
- overnment and education cilities
- esidential properties

#### **FEATURES & BENEFITS**

- High gloss
- Excellent adhesion
- Self-levelling
- Self Priming
- Low VOC's (Volatile Organic Compounds)
- Low viscosity
- Excellent abrasion resistance
- Excellent chemical resistance
- High durability
- Pre-coloured / tinted
- Solvent free
- Food contact safe



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#### **ENVIRONMENTAL CONDITIONS**

Temperature and the surrounding atmospheric conditions will play a part in the curing process of all epoxy products. Under conditions of low temperatures and high humidity, the final cured surface finish can be adversely affected potentially resulting in poor gloss retention, discolouration over time, poor overcoat ability, and inter-coat adhesion. Quite often these conditions will result in the formation of a white film over the surface often evident after contact with water. This chemical reaction with the atmosphere is commonly referred to as "amine bloom" or "amine blush".

If this occurs then the existing coating will need to be abraded to completely remove the affected surface to ensure the adhesion of subsequent application. In some cases, partial or complete re-priming may be necessary. Attention also needs to be paid to the substrate temperature which should be at least 10°C and preferably 5°C above the dew point during the curing phase. Ideal humidity is 50-70%.

Industry standards recommend the accurate recording of times and dates, batch numbers, consumption rates, and environmental conditions including the substrate and air temperatures, humidity levels, and dew point readings during both the application and curing process. Full material warranties cannot be provided unless all the relevant data has been recorded accurately.

### **SURFACE PREPARATION**

Ensure the concrete is sufficiently cured to the recommended minimum of 28 days from completion. Diamond grind or Polyvac the substrate. The surfaces must be clean, dry, and free from all traces of loose material, old coatings, curing compounds, release agents, laitance, oil, and grease, etc. This must be completed by diamond grinding or a suitable cleaning method.

To check that all traces of oil and other contaminants have been completely removed, sprinkle a few drops of water over the surface. If all water is quickly absorbed, the surface is sufficiently oil and grease-free. If water forms into globules that remain on the surface, further thorough treatment of the substrate is necessary. Substrate compression strength should be at least 25MPa, cohesive bond strength at least 1.5MPa, and moisture content below 4%. Repair and fill cracks with Epoxy Putty or Concrete Repair Kit.

## **PRODUCT APPLICATION**

If using more than one kit, compare the batch numbers on the lids of the packaging and ensure different batches are combined to create an even finish. Small variances in colour may occur between different batches of the product as part of the normal manufacturing process of Premium Tinted Epoxy.

#### Mix Epoxy Resin Part A thoroughly prior to combining with Epoxy Hardener Part B.

Mix 3 Parts A with 1 Part B (3:1) by volume. Mix with a drill mixer at a slow speed for 2 minutes. Ensure the sides and bottom of the container/bucket are mixed. Tilt the drill to the side to ensure the product on top of the container/bucket is mixing in with the product on the bottom. In normal curing conditions, the Coating Kit does not require an induction time and coating can begin immediately after mixing. For colder climates, see product cautions for further information on mixing and induction times.

It is recommended that the first coat be applied with a recommended 10% of Epoxy Thinners to ensure high penetration and adhesion to the coating substrate. Subsequent coats can be thinned, but sufficient curing time will be required to allow for the evaporation of solvent content from the product before re-coating or top coating when used as part of a system. The re-coat time is typically, 12-24 hours at 25°C. Apply using a brush or lint-free roller.

If recoating after 72 hours a light sand will be required to ensure adhesion of any following coats.



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## CAUTIONS

- When used as a self-leveling floor coating, it will not profile irregular substrates. For the profiling of defects on horizontal surfaces a suitable patching or repair mortar will be required.
- The mix ratio is calculated by product volume. NOT BY PRODUCT WEIGHT. Mixing products by weight may result in an unsatisfactory cure time or failure of the mix to cure entirely.
- To achieve optimum results in colder climates, you may need to warm the resin or introduce an induction time before application. This will jump-start the curing process.
- Exposure to sunlight and UV radiation can result in discolouration and chalking of the cured surface. While this will have no adverse effect on the protective functions of the coating, the system can be finished with a UV stable and protectant top coat.
- Lighter colours may appear translucent when applied as a plain coating and may require additional coats.

Sample Identification	Critical Heat Flux (kW/m2)			Smoke Value %.min		
Epoxy Coating Kit Tinted	≤11	≤11	≤11	5	1	2
	Average: ≤11		Average: 3			
Epoxy Resin Clear Glaze	≤11	≤11	≤11	<4	<4	<4
	Average: ≤11			Average: <4		
Epoxy Resin Clear	≤11	≤11	≤11	<4	<4	<4
	Average: ≤11		Average: <4			

### **PHYSICAL PROPERTIES**

Solids Content	100%				
Impact Strength	High				
<b>Compressive Strength</b>	ASTM D695: 12,000 PSI				
Tensile Strength	ASTM D638: 3,900 PSI				
Elongation at Break	ASTM D638: 7.00%				
<b>Taber Abrasion Resistance</b>	ASTM D4060: 133mg loss				
(mg of loss/1000 cycles) H022-wheel, 1 kg load					
Water Absorption	ASTM D570: 0/07% (2 hour boil)				
Flexural Strength	ASTM D790: 7.800 PSI				
Shore D Hardness	ASTM D2240: 89				
Bond Strength to Concrete	100% Concrete Failure				

#### **Heat Distortion Temperature**

ASTM D648: 50°C.

#### Resistance to Chemical Spills (7 days at 25°C)

Ammonia Solution (20%) Sulphuric Acid (30%) Lactic Acid (5%) Sodium Chloride (50%) **Tannic Acid** Acetic Acid (5%)

Sodium Hydroxide (30%) Kerosene **Aviation Fuels** Petrol Hydrochloric Acid (20%) Toluene

#### In an emergency, contact the Poisons Information Centre on 13 11 26 or a doctor for advice. IF THE SITUATION IS LIFE THREATENING, DIAL 000 IMMEDIATELY.

DISCLAIMER: Please ensure you read the SDS & TDS thoroughly & carefully before the use or application of any Betu product. These documents contain information in context to how you will apply the product, including if it is being used in conjunction with any other products or systems, and to what surface the product will be applied. Betu does not accept any liability either directly or indirectly for any losses that arise from the use or application of the product in accordance with any advice, specification & recommendation given by the companies' documentation or representatives at any point in time. Application, performance & safety data may change from time to time. It is the user and/or applicators' responsibility to ensure they have the latest copy of any documentation pertaining to their project.

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