

## TECHNICAL DATA SHEET

### PRODUCT

### **UT100 TWO-PACK ACRYLIC URETHANE TOPCOAT**

### DESCRIPTION

UT100 2-Pack topcoat is an unmodified acrylic polyurethane designed to maintain maximum appearance for the maximum length of time. Its principal application areas are for the decoration and protection of railway rolling stock, auto-refinish, buses, marine craft, signage, concrete and masonry.

### PROPERTIES

#### **COLOUR**

: Full colour range or matchings on request.

#### **GLOSS LEVEL**

: Full gloss (other levels available).

#### **WEATHERING**

: Excellent.

#### **CHEMICAL RESISTANCE**

: Very good.

#### **SOLVENT RESISTANCE**

: Very good.

#### **ABRASION RESISTANCE**

: Very good.

#### **TEMPERATURE RANGE**

: From -30 °C up to 150 °C (dry).

### TECHNICAL DATA

**RECOMMENDED FILM BUILD** : 100 microns (wet)                      40 microns (dry)

**VOLUME SOLIDS** : approximately 40 %                      (depending on color)

**THEORETICAL COVERAGE** : Approx. 10 metres<sup>2</sup> / litre at 100 microns wet.

**COMPONENTS** : Two.

**MIXING RATIO** : 4 parts Part "A" : 1 part "B" by volume

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**DRYING AT 25 °C** Touch dry: 2 hrs Handleable: 6 hrs  
Recoat: 4 hrs Full cure: 7 days

**CHEMICALLY ASSISTED  
DRYING AT 25 °C** Touch dry: 1 hr Handleable: 3 hrs  
Recoat: 2 hrs Full cure: 7 Days

**POT LIFE AT 25 °C** 8hrs.

**APPLICATION METHODS** Air or airless spray, Brush or roller in smaller areas only & must use UT102 Flow Thinners.  
Chemically assisted drying requires air atomisation or shaping air.

**FLASHPOINT** 23 °C

**SHELF LIFE** 12 months (minimum) in original containers

**PACKAGING** Part A 4 Lt. 20 Lt.  
Part B 1 Lt. 4 Lt.

### SYSTEM RECOMMENDATIONS

SUBSTRATE	PREPARATION	COATING SEQUENCE	FILM BUILD WET (DRY)
<b>STEEL</b>	Abrasive blast Clean AS1627.4 class 2.5 (min)	1st coat : BC300 2- pack Metal Etch Primer OR 1st coat: EP210 2-pack Anti-corrosive Primer Finish coat: UT100 Series Acrylic Topcoat	40 - 50 (10 - 15) microns  150 (75) microns 100 - 120 (40 - 48) microns
<b>GALVANISED STEEL</b>	Degrease and mechanically abrade. New Gal may require acid wash.	1st coat: EP200 2-pack Epoxy Primer. Finish coats: UT100 Series Acrylic Topcoat	80 - 100 (30 - 40) microns 100 - 120 (40 - 48) microns
<b>ALUMINIUM</b>	Degrease thoroughly. Abrade if necessary.	1st coat : BC300 2- pack Metal Etch Primer OR 1st coat: EP200 2-pack Epoxy Primer Finish coat: UT100 Series Acrylic Topcoat	40 (10) microns 80 - 100 (30 - 40) microns 100 - 120 (40 - 48) microns
<b>G.R.P.</b>	Remove mould release or degrease.	1st coat: EP200 2-pack Epoxy Primer Finish coat: UT100 Series Acrylic Topcoat	80 - 100 (30 - 40) microns 100 - 120 (40 - 48) microns

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**SYSTEM RECOMMENDATIONS**

SUBSTRATE	PREPARATION	COATING SEQUENCE	FILM BUILD WET (DRY)
<b>TIMBER *</b> * UT100 Clear on externally exposed timber - <b>NOT</b> recommended	Sand and remove dust.	1 <sup>st</sup> Coat : UT300 or UT310 2-pack Timber Sealer 2 <sup>nd</sup> Coat : UT220 or UT240 2-pack sanding undercoat Finish coat: UT100 Series Acrylic Topcoat	30 microns  80 - 100 (30 - 40) microns  100 - 120 (40 - 48) microns
		OR	
		1 <sup>st</sup> Coat : UT220 or UT240 2-pack sanding undercoat  OR 1st Coat : EP200 2-pack Epoxy Primer  Finish coat: UT100 Series Acrylic Topcoat	80 - 100 (30 - 40) microns   80 - 100 (30 - 40) microns  100 - 120 (40 - 48) microns
<b>CONCRETE / MASONRY</b>	Acid wash new surfaces. Remove dust, oil, grease and loose material from aged surfaces.	1st Coat : EP200 2-pack Epoxy Primer  Finish coat: UT100 Series Acrylic Topcoat	80 - 100 (30 - 40) microns   100 - 120 (40 - 48) microns

**SURFACE PREPARATION**

**STEEL**

Remove any grease or oil using suitable solvent or water based degreaser. Acid or alkali presence should be neutralized with appropriate products Followed by thorough rinsing with water. Any other foreign matter eg. rust, mill-scale etc., should be abrasively blast cleaned to Australian Standard AS1627.4 class2.5 for ambient conditions or Class 3 for immersion conditions.

**GALVANISED STEEL OR ALUMINIUM**

Remove any grease or oil using suitable solvent or water based degreasers. (See AS16271.1). Mechanical abrasion and dust off should follow.

**CONCRETE / MASONRY**

Acid wash new surfaces using dilute hydrochloric acid. Wash with fresh water and allow to fully dry.

**TIMBER / M.D.F. G.R.P.**

Sand or de-nib and dust off prior to sealing. Remove any grease, oil or mould release using suitable solvent or water based degreaser. Allow to dry thoroughly before coating.

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#### APPLICATION

##### **MIXING**

Stir each of the components till homogenous.  
Mix all base and hardener components until fully blended.  
Allow induction time of 10 - 15 minutes prior to commencing application.  
For smaller quantities mix 4 parts of base to 1 part hardener by volume.

For improved resistance properties in water immersion conditions (e.g. marine use), mix 3 parts of base to 1 part hardener by volume

##### **THINNING**

Use recommended thinner only, up to a maximum of 20 % by volume depending on method of application employed.

##### **BRUSH OR ROLLER**

Use brush for small or difficult areas & must use UT102 Flow Thinners. Short nap roller is recommended with two coats for best result and even finish. Wash-up with UT100 U-Thane Thinner or BC Gunwash.

##### **SPRAYING**

Conventional pressure pot : 1.5 mm Fluid orifice using 385 kpa (50 psi).  
Pressure at pot : 65 kpa (10 psi)  
Pressure at Gun : 385 kpa (50 psi)

##### **AIRLESS**

Standard airless equipment using 28:1 pump ratio and fluid tip range 475 - 525 microns (0.019 - 0.021 inches) and supply air at 520 - 650 kPa (80 - 100 psi). Thin as necessary with UT100 U-Thane Thinner.

##### **EQUIPMENT CLEANUP**

All equipment should be thoroughly cleaned with UT100 U-Thane Thinner or BC Gunwash.

#### PRECAUTIONS

##### **SAFETY**

Provide adequate ventilation during use.  
Airflow should be adequate to ensure a comfortable working atmosphere. When spray painting, users should comply with the provisions of the State Spray Painting Regulations.  
Where this is not possible, operators must use an air supplied respirator Complying with Australian Standards AS1715 and AS1716.

This product is flammable and all sources of ignition (flame, pilot lights, furnaces, spark producing switch etc.) must be eliminated in, or near the application area.

**DO NOT SMOKE.**

This product is poly-isocyanate catalysed and all the necessary precautions must be observed when handling this type of material.

Avoid contact with skin and eyes.

Wear protective goggles and gloves when handling the material.

In the case of skin contact, remove contaminated clothing and wash skin thoroughly with clean water.

Seek medical attention if eyes are affected by splashes or fumes.



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#### GENERAL

Freshly mixed material must **NOT** be added to material which has been in use for some time.

Rate of cure is dependent upon temperature.

Do **NOT** apply this product at ambient temperatures below 15 °C or greater than 40 °C or at relative humidities less than 25 % or above 85 %.

Ensure maximum recoat interval is not exceeded otherwise surface must be lightly abraded and then dusted to ensure maximum inter-coat adhesion.

Shelf life is normally 12 months but depends on storage conditions.

#### DANGEROUS GOODS

Part A	Class 3.1	UN	1263	PAINT	HFP
Part B	Class 3.2	UN	1866	PAINT	HFP

This data sheet is based on information in BC Coatings possession at date of issue.  
BC Coatings supplies its products only on condition that the consumer is satisfied as to the performance of the product in meeting his particular requirements.