

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).

Due to the variable nature of substrates UT100 Matte may vary in gloss from 2-10%

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 metres² / 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)
STEEL	Abrasive blast Clean AS1627.4 class 2.5 (min)	1st coat : BC300 2- pack Metal Etch Primer OR	40 - 50 (10 - 15) microns
		1st coat: EP210 2-pack Anti-corrosive Primer Finish coat: UT100 Series Acrylic Topcoat	150 (75) microns 100 - 120 (40 - 48) microns
GALVANISED STEEL	Degrease and mechanically abrade. New Gal may require acid wash.	1st coat: EP200 2-pack Epoxy Primer.	80 - 100 (30 - 40) microns
		Finish coats: UT100 Series Acrylic Topcoat	100 - 120 (40 - 48) microns
ALUMINIUM	Degrease thoroughly. Abrade if necessary.	1st coat : BC300 2- pack Metal Etch Primer OR	40 (10) microns
		1st coat: EP200 2-pack Epoxy Primer	80 - 100 (30 - 40) microns
		Finish coat: UT100 Series Acrylic Topcoat	100 - 120 (40 - 48) microns
G.R.P.	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)
TIMBER * * UT100 Clear on externally exposed timber - NOT recommended	Sand and remove dust.	1 st Coat : UT300 or UT310 2-pack Timber Sealer 2 nd 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 st 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
CONCRETE / MASONRY	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.