



**SeaCoat**  
TECHNOLOGY, LLC

# U – 603 General purpose Utility Coating

## Waterborne Polysiloxane - Urethane

### PRODUCT DESCRIPTION:

**U – 603™** is a single pack waterborne Polysiloxane-Urethane. Uniquely formulated to provide superior resistance of urethanes and Silicone (polysiloxanes). This environmentally safe coating is easy to use and clean up compared to standard two component systems. This novel chemistry provides flexibility, durability and UV resistance qualities of polysiloxanes. **U – 603™** is a versatile, highly elastomeric system yet maintains excellent abrasion, good solvent, acid and caustic resistance without blistering, peeling or yellowing. **U – 603™** is rated for exterior exposure with minimal chalking, dulling or loss of gloss. It is formulated as a one coat DTM (Direct to Metal) or as top coat. **U – 603™ is supplied with a catalyst/ accelerator that will dramatically increase adhesion, crosslinking and resistance properties. Once the accelerator/ catalyst is added the pot life is 5 – 6 hours.**

### SUBSTRATES:

- Steel
- Aluminum
- Fiberglass /Gel-Coat
- Wood
- Concrete

### APPLICATIONS:

- Storage tanks / tank Farms
- Marine environments
- Railroad
- Structural steel
- Bridges

### FEATURES & BENEFITS

- Waterborne/Low VOC
- Single pack system / Optional accelerator
- Primerless technology
- Highly economical
- Excellent resistance properties

- Outstanding flexibility without forfeiting hardness
- UV resistant
- Available in a wide variety of colors

### TECHNICAL DATA

TYPE: Waterborne Polysiloxane-Urethane  
COLOR: Factory tinted or point of sale  
GLOSS: 70 @ 60°/ (semi gloss)  
SOLIDS: 80 % ± 2%  
WEIGHT: 9.9 lbs. per gallon  
FLASH POINT: > 212° F (100° C) Aqueous solution  
VOC CONTENT: <.67 lb. per gallon (37.74gr./liter) as supplied.

REDUCTION SOLVENT:None: Do not alter or thin.

CLEAN UP  
SOLVENTS: Water, Denatured Alcohol

TYPE OF CURE: Ambient, Air, UV./Optional accelerator

POT LIFE: Not applicable. Reseal original container and store in a cool dry place.

DRY TIMES: (@ 77° F (25° C) 50% R.H.)\*  
TACK FREE: 45 minutes @ 5 mil (125 microns) DFT  
RECOAT: No Limit  
FULL CURE: 24 Hours (depending on temp.)

TEMPERATURE RESISTANCE (Dry):  
°F °C  
Continuous: <200 <143 (Dry)

\*For shorter dry times consult your sales representative or [SEA-COAT TECHNOLOGY, LLC](http://SEA-COAT TECHNOLOGY, LLC) technical support @ 713 480 4397.

PERFORMANCE DATA			COVERAGE
Impact strength, in../lbs.	ASTM D 4226	40+	Theoretical @ 1.0 mil dry = 1283 sq.ft/gal
Hardness, shore D	ASTM D 2240	54 -62	Practical apply @ 5mil dry = 160 - 256 sq.ft/gal
Elongation % @ break	ASTM D 639	74%+	Recommended film thickness 5 - 8 mils
Tensile strength, psi.	ASTM D 638	3830	Apply at 160 - 256 sq.ft/gal
Abrasion resistance	ASTM D 4060		
(cs 17 wheel, 1000 gr. Load, 1000 cycles)		70 mg loss	

### SURFACE PREPARATION

**Steel:** Any and all sharp edged metal should be contoured. Weld flux and residual splatter removed. Oils and greases shall be removed with solvents in accordance to (SSPC) SP - 1. NOTE: **U - 603™** can be applied over most organic, inorganic zinc primers or zinc rich epoxy or epoxy primers. The primer must be allowed to cure to a solvent free stage prior to topcoating with **U - 603™**.

**For DTM** (direct to metal applications) the preferred surface preparations in order of preference are A) a white metal blast (SSPC) SP - 5, 2) Near white blast (SSPC) SP - 10, and 3) Commercial blast (SSPC) SP - 6. A minimum anchor pattern profile of 1.5 mils must be present.

**For a system** (primer & topcoat) application, a near white blast (SSPC) SP - 10 is required for maximum performance. The minimum requirement shall be a commercial blast (SSPC) SP - 6, with a uniform anchor pattern profile of 1/2 - 2 mils. All cleaned and blasted areas should be coated prior to the onset of flash rusting.

**Galvanized steel or aluminium:** Remove oil & grease with a neutral detergent or commercially available pre solution such as Galvaprep®, Devprep 88® or equal. A light blast with a fine abrasive is the best means of preparation.

**Fiberglass or Gel – Coat applications:** For application to new or uncoated fiberglass or gel-coated surfaces, use 60 or 80 grit sandpaper to abrade the surface. Follow with dry compressed air to remove dust. **DO NOT USE SOLVENTS TO WIPE DOWN THE SURFACE.** For application to previously coated fiberglass or gel-coated surfaces, remove all loose coating with high pressure water blasting or other suitable means. Use 60 or 80 grit sandpaper to abrade the original substrate and any residual coating that cannot be removed from the surface. Follow with dry compressed air to remove dust. **DO NOT USE SOLVENTS TO WIPE DOWN THE SURFACE.**

**Wood:** The substrate must be dry. Any existing loose coating should be removed.

**Concrete:** New concrete should be acid etched or shot blasted. Any existing coatings must be removed by shot blasting. The substrate must be dry prior to applying **U - 603™**

### APPLICATION METHODS

Material is ready to use as supplied. Stir the **U - 603™** with a rotary mixer slowly without mixing air into the product. If desired add the accelerator/catalyst and mix for several minutes to ensure proper dissipation (**NOTE: ONCE THE ACCELERATOR CATALYST IS ADDED, POT LIFE IS APPROXIMATELY 6 HOURS**). The **U - 603™** may be applied by brush, roller, airless. (30: 1 ratio minimum) For optimum appearance spraying is the preferred method. Tip size recommendations are .011" - .015"

**For DTM** apply a thin coat (2-3 wet mils) as a primer tie coat. Allow several min. to tack. Follow with the primary coat of 4 - 7 wet mils. For a non skid surface, apply a base coat (3 - 4 wet mils) . Then broadcast dry sand, pumice, aluminum oxide or stainless steel shavings as aggregate within 10 minutes. Allow to cure to a tack free state, approximately 30–45 min. and follow with a topcoat of 7 - 8 wet mils. For application in conjunction with a primer, apply one coat at the rate of 7.5 -10 wet mils over primer.

**Temperature restriction:** To utilize **U - 603™** as supplied, the ambient and surface temperature must be a minimum of 45° F (7° C); the surface temperature must be a minimum of 7° F above the dewpoint

### SAFETY PRECAUTIONS & CLEANUP

This material is intended for use by professional applicators. Keep out of reach of children.

Proper industrial hygiene procedures consistent with OSHA regulations must be utilized. Always use protective goggles, gloves, respiratory equipment and appropriate clothing. Refer to material safety data sheet for full details.

Cleanup: Uncured product and equipment may be cleaned with fresh water.

### AVAILABILITY AND SHIPPING INFORMATION

Packaging:	One gallon cans	Weight:	9.9 Lbs./Net
	Five gallon pails	Weight:	49.5 lbs./Net

Freight Classification: Class 55

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