

sti[®] Seamless Technologies, Inc.

SeamTek[®]

Clear Urethane Seal Coat UG-500

Product Data

Description

Two part high solids aliphatic urethane, polyester type, finish coating for exterior applications.

Color

Clear. Special gloss can be matched upon request.

Packaging

One and five gallon kits, premeasured for easy blending at jobsite.

Uses

Seal Coat UG-500 HS clear has non-chalking properties combined with excellent abrasion, chemical, solvent and good heat resistance properties. It provides excellent gloss retention and will continue to retain a high gloss through many years of service. Since this is a clear coating it should only be applied over ultra violet stable surfaces, particularly when used outside. It can be used where ever a clear coating is required to add gloss, abrasion resistance or chemical resistance to a surface. It can be used to enhance the color of brick, or colored concrete surfaces, while also offering resistance to graffiti.

Technical Data

Volume Solids:	H.S. 56%
Weight Solids:	H.S. 61%
Dry Film Thickness,	Minimum: 1.5 mils per coat
	Maximum: 3.0 mils per coat
Theoretical coverage @ 2 mils DFT:	425 sq. ft./gallon
Drying Time @ 70°F., 50% R.H.:	To Touch – 1 hour
	To recoat – 3 hours
	Mar free – 12 hours
	Max. hardness – 7 days
Pot Life @ 70°F., 50% R.H.:	6 hours
Primer:	Seamtek SR101 or S450
Minimum application temperature:	25°F. or within 10° of dew point
Service temperature range:	40°F. to +250°F.
Fire Resistance of dry film:*	Self extinguishing
Method of application:	Brush, roll, spray
Cleanup Solvent:	Denatured Alcohol
Shelf Life	
Part A (polyol)	2 years, if unopened
Part B (hardner)	1 year, if unopened
Mix Ratio:	2 parts A to 1 part B by weight or volume
Induction Time:	None required

Test Data

Taber Abrasion (CS-17 , 1000 gms.)
 1000 Cycles 28 mg.
 Pencil Hardness 2H

Flexibility (ASTM D-222)

Pass 1/8" mandrel bend

MEK Double Rubs, 48 hr. cure. Pass 100

Gardner Impact 160 in. lbs, direct and reverse

CHEMICAL RESISTANCE

Hydrochloric Acid 5%	Excellent	Oxalic Acid 10%	Excellent
Hydrochloric Acid 10%	Excellent	Citric Acid 10%	Excellent
Sulphuric Acid 5%	Excellent	Lactic Acid 85%	Good
Sulphuric Acid 10%	Excellent	Oxalic Acid	Good
Sulphuric Acid 30%	Good	Oleic Acid	Excellent
Nitric Acid 5%	Excellent	Maleic Acid 10%	Excellent
Nitric Acid 10%	Excellent	Gasoline	Excellent
Phosphoric Acid 10%	Good	Toluene	Excellent
Phosphoric Acid 50%	Good	Xylene	Excellent
Caustic Soda 10%	Excellent	Methanol	Excellent
Caustic Soda 40%	Excellent	Ethanol	Excellent
Ammonia 5%	Fair	Ethylene Glycol	Excellent
Ammonia 10%	Fair	Ethyl Acetate	Excellent
Sodium Bicarbonate 10%	Excellent	Acetone	Excellent
Sodium Chloride Solution 5%	Excellent	Methyl Ethyl Ketone	Excellent
Sodium Chloride Solution 10%	Excellent	Methyl Isobutyl Ketone	Excellent
Ammonium Chlorate 30%	Excellent	Perchloroethylene	Excellent
Formic Acid 10%	Good	Tricresyl Phosphate	Excellent
Acetic Acid 10%	Good	Tricresyl Phosphate	Excellent
Methylene Chloride	Poor	Skydrol A500	Excellent
MIL-E-23699 Hydraulic Oil	Excellent	JP-4 Jet Fuel	Excellent

RATING SYSTEM – TESTS WERE RUN IN TOTAL IMMERSION AND FOLLOWING RATES GIVEN: **Excellent** – 3 months with no blistering or coating degradation. **Very Good** – 2 months with no blistering or coating degradation. **Good** – 1 month with no blistering or coating degradation. **Fair** – ½ month with no blistering or coating degradation. **Poor** – Less than ½ month.

Surface Preparation

Surfaces should be cleaned of oil, grease and dirt. If applied over a smooth, glossy surface, the surface should be grit blasted or sanded to create a surface profile for optimum adhesion. When painting over previously painted surfaces a spot test should be

made, to check for lifting, or incompatibility with the old coating. It is extremely important that this surface is free of all moisture prior to coating application or blistering of paint film may occur.

SUGGESTED SPRAY EQUIPMENT SETTINGS

Equipment	Gun	Fluid Tip or Nozzle	Gun Pressure	Fluid Needle or Temp.	Air Cap or Pattern
Normal Spray De Vilbiss	MBC 510/ JGA 502	E or FF		E or FF	765
Binks Airless	18	66 or 63C		65 or 63A	63PB
De Vilbiss 4711	JGA-5026	JAC-31	2000-2200 psi	Ambient	12-14 in.
Binks 98 Series	39/43	9-1860	2000-2200 psi	Ambient	12-14 in.
Grayco Hydra-	Std.	163-617	2000-2200 psi	Ambient	12-14 in.
Spray	Std.	20C09	2000-2200 psi	Ambient	16-18 in.
Nordson Spraying Systems Gunjet	25A	650050TC	2000-2200 psi	Ambient	12-14 in.

Use DRY air source and properly maintained moisture traps on all equipment. Clean equipment IMMEDIATELY after use with CFI 704 cleanup solvents.

Application

Seal Coat UG-500 can be applied immediately after mixing the two components. However, thorough mixing of the two components is important. Mechanical mixing is preferred at slow speed to avoid air entrapment. This coating may be applied by spray (air or airless), brush or roller (close nap). If application is by spray method suitable protective vapor/particulate respirators (NIOSH approved) should be worn by all personnel in the area. In poorly ventilated enclosed areas or when airborne concentrations exceed TLV (ceiling) for HDI, a fresh air supplied mask should be worn (such as #W-3060 mfg. by 3M Co.). In all cases, observe OSHA regulations for respirator use (29 CFR 1910.134) whenever a respirator is used. Spray equipment must be equipped with properly working vapor traps and air supply must be dry.

PRECAUTIONS

Part B contains aliphatic polyisocyanate prepolymers. When combined with Part A, warning applies to complete mix. Use adequate ventilation. In confined areas, use adequate forced ventilation during application and drying.

If application is by spray method suitable protective vapor/particulate respirators (such as #8709 mfg. by 3M Co.) should be worn by all personnel in the area. In poorly ventilated enclosed areas or when airborne concentrations exceed TLV (ceiling) for HDI, a fresh air supplied mask should be worn (such as #W-3060 mfg. by 3M Co.). In all cases, observe OSHA regulations for respirator use (29 CFR 1910.134) whenever a respirator is used.

HARMFUL OR FATAL IF SWALLOWED. If swallowed to not induce vomiting. Call physician immediately. **Eye Irritant.** Wear eye protection. In case of contact with eyes, flush repeatedly with water and contact a physician. **Difficult to Remove From Skin.** Wear gloves and protective clothing. Do not attempt to remove cured coating on skin with solvent; soak in warm, soapy water. Barrier creams are not recommended where possible to cover with protective clothing.

COMBUSTIBLE. Keep away from heat, sparks and open flame. Refer also to Material Safety Data Sheet.