

Rule 1151

**Technical Data** 

Revision date: 04/16

#### DESCRIPTION

Speedliner 1000 Low VOC is a high performance urethane elastomeric texture coating specifically designed for high build applications and formulated to comply with California Rule 1151 Low VOC. When fully cured, Speedliner 1000 Low VOC forms an extremely tough, abrasive resistant rubber coating, especially well-suited for applications requiring protection from impact, abrasion or corrosion on metal, wood or concrete surfaces. Speedliner 1000 Low VOC texture surfaces provide an excellent non-slip surface in both wet and dry environment. It is recommended to use Primer 450 Low VOC in conjunction with Speedliner 1000 Low VOC to meet VOC regulations for California Rule 1151.

Easy application using a simple Hopper gun used for plaster applications, available at most hardware stores. For a higher volume application use a Binks pressure pot and Binks 2001 spray gun. Speedliner 1000 Low VOC does not require a humidity-controlled environment for application. Ultraviolet stabilizers can be applied in almost any color. Convenient pre-measured one gallon kits.

Speedliner 1000 Low VOC has excellent abrasion resistance and will out wear many other materials when subjected to impingement or slurry abrasion. Abrasion resistance ASTM D 3389-94 (Taber Model 502/C-17 wheel with 1000 gram load). 4.4 mg abrasion loss per 1000 revolutions.

### **FEATURES**

Speedliner 1000 Low VOC has been successful at temperatures up to 180°F. Under wet or humid conditions at elevated temperatures; Speedliner 1000 Low VOC is superior to most other urethanes. Although Speedliner 1000 Low VOC becomes stiffer at lower temperatures it still remains flexible at temperatures as low as -70°F. Speedliner 1000 Low VOC has excellent chemical resistance in the pH range of 2 to 12. Resistance to most oils at room temperature is good, but resistance to solvents is generally poor. The table below gives an indication of resistance to some chemicals; however, users should conduct their own tests.

Chemical	Resistance	Chemical	Resistance
Chlorinated Water	E	Sea Water	Е
Nitric Acid, 5%	Р	Toluene	Р
Hydrochloric Acid , 5%	Р	Methyl Ethyl Ketone	Р
Phosphoric Acid, 10%	G	Ammonia	F
Sodium Hydroxide, 10%	Р	Kerosene	Р

F – Fair P - Poor G - Good E - Excellent

The resin portion of Speedliner 1000 Low VOC will crystallize when exposed to temperatures below 40°F. The curative portion may crystallize when exposed to temperatures below 20°F. This does not harm the components; however, the resin component should be warmed to between 90°F and 100°F, and the curative component to room temperature and each component mixed well before using. The components should not be overheated and should be cooled to room temperature before mixing together. After long-term storage it is a good policy to stir each component before adding them together.

Speedliner 1000 Low VOC should only be applied to surfaces that have been properly prepared. Most common materials, such as steel, aluminum, fiberglass, rubber, urethane, brick, concrete and wood can be coated with Speedliner 1000 Low VOC (when coating surfaces other than steel truck beds please contact your Speedliner distributor for special preparation and priming procedures update). To obtain maximum adhesion most substrates must be abraded, gritblasted or etched before applying primer and Speedliner 1000 Low VOC. New metal surfaces should be grit-blasted to SSPC-SP-10 "Near White Metal Blast" and should exhibit a 2 to 4 mil surface profile.

## **MIXING AND** APPLICATION

Metallic substrates must always be dry and primed with Primer 450 Low VOC before applying Speedliner 1000 Low VOC.

The time required for Speedliner 1000 Low VOC to cure is dependent upon temperature. A 75% cure is generally sufficient for mild abrasion and submersion. The cure times shown below are for a 100-mil thick coating; cure times should be increased by 50% for a 250-mil thick coating.

Vapors from Speedliner 1000 Low VOC contain isocyanates and solvents. Supplied fresh air ventilation must be used for all indoor applications. When working in tanks and other closed vessels or downstream from spray gun, fresh air breathing equipment should be worn at all times. Both resin and curative components contain flammable solvents and should be protected from sparks and open flames. Avoid contact of components with skin and clothing as both resin and curative can cause skin and eye irritation. In case of eye contact, immediately flush with plenty of water for at least 15 minutes. If swallowed do not induce vomiting. Call a physician at once. Keep out of reach of children.

Equipment must be cleaned immediately after use to prevent buildup of cured urethane on internal parts of equipment. Solvents, such as Toluene or M.E.K. work well for cleaning soiled spray equipment. As soon as urethane spraying is completed, solvent should be pumped through the pump, hose and spray gun until solvent comes out clear. Dispose of all empty Speedliner 1000 Low VOC component containers in accordance with all local, state and federal regulations. Empty component containers can be rendered non-hazardous by rinsing the containers with a small amount of mixed material and allowing the solvent to evaporate. The containers will then contain non-hazardous cured urethane.

VOC

Mixed VOC Content (A + B) Exempt VOC Non-Exempt VOC 355 grams/liter 157 grams/liter 198 grams/liter



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	Mix Ratio By weight		100 parts A/ 32 part B		
	Mix Ratio By volume	Mixed:	3 parts A/ 1 parts B		
PHYSICAL	Color		Clear with 19 available colors		
	Working Life @ 72°F		45 minutes		
	Specific Gravity: (Mixed)		0.969		
<b>PROPERTIES</b>	Weight/Gallon Mixed		8.08 lbs.		
	% Solids by Volume		65%		
	Hardness @ 72° F	ASTM 2240	95-90 Shore A		
	Tensile Strength	ASTM D-412 Die C	5638 psi		
	Elongation	ASTM D-412 Die C	442%		
WORKING	Tear Strength	ASTM D-624	990 (lbs./in.)		
PROPERTIES	Dielectric Strength	ASTM D-149-97a Method A	278 (V/mil)		
PROPERTIES	Taber Abrasion (Taber Model 502) with	ASTM D-3389-94	Abrasion loss (mg/1000 rev.) 4.4		
	C-17 Wheel @ 1000 grams load		mg		
	Brittleness Temperature	ASTM D-746	-97.60°F (-72°C)		
	Federal Motor Vehicle Flammability Test	FMVSS-302	Pass		
	50°F	75°F	100°F		
<b>CURE TIMES</b>	Cure Time 75% 6 days	3 days	1 day		
	Cure Time 95% 15 days	7 days	3 days		
CLEAN UP	Dispose of all empty Speedliner 1000 Low VOC component containers in accordance with local, state and federal regulations. Empty component containers can be rendered non-hazardous by rinsing the containers with a small amount of mixed material and allowing the solvents to evaporate. The containers will then contain non-hazardous cured urethane.				
STORAGE AND SHELF LIFE	Speedliner 1000 Low VOC components are shipped from the factory in sealed containers that are purged with dry nitrogen. The containers should be kept tightly sealed and stored in a cool and dry area that is protected from direct sunlight and moisture. Storage temperatures should not exceed 80°F. Shelf life of factory sealed containers stored under these conditions is one year. Containers that have been opened should be resealed immediately after material has been removed in order to prevent moisture contamination and solvent evaporation. Resin component containers should be purged with dry nitrogen if the contents are not used within 24 hours after opening.				
SHIPPING CLASS	Class 92.5 Hazardous				