



GuardTop TRMSS Tire Rubber Modified Surface Sealer Product Specification - California

Revised July 2023

GuardTop Tire Rubber Modified Surface Sealer (TRMSS) Product Specification

Specifications for finished product	Minimum	Maximum	Test Method
Density, lbs / gallon	8.3	9.0	ASTM D 2939.07
Solids by Evaporation, % weight	30%	50%	ASTM D 2939.08
VOC Content by Volume	0%	3%	ASTM D 244-89
Viscosity, Krebs Units	45	105	GuardTop Report
	Requirements	Results	
Accelerated Weathering (2 yrs)	No Material Deterioration After Exposure	Passes/Excellent	Federal Spec TT-C-555B
Resistance to Wind Driven Rain (98mph)	No Leaks or Weight Gain	Passes/Excellent	Federal Spec TT-C-555B
Ultraviolet Resistance (12 yrs.)	No Cracking, Peeling, Chipping, or Flaking	Passes/Excellent	GuardTop Report
Color as Received	Black	Pass	GuardTop Report
Cured Film	Deep Black	Pass	GuardTop Report
Material Uniformity	Uniform	Pass	ASTM D 2939.05
Flashpoint	> 450°F	Pass	ASTM D 2939.12
Softening point	> 140°F	Pass	ASTM D 36
Drying Time, firm set	Within 8 Hours	Pass	ASTM D 2939.13
Resistance to Heat	No Sagging or Slipping	Pass/None	ASTM D 2939.14 (1)
Resistance to Water	No Cracking	Pass	ASTM D 2939.15 (1)
Resistance to Kerosene	Pass	Pass	ASTM D 2939 (1)
Flexibility	Pass	Pass	ASTM D 2939.16 (2)
Direct Flame Test	No continued combustion or slippage and run-down	Pass/None	ASTM D 2939.20
Wet Film Continuity	Uniform consistency	Pass	ASTM D 2939.22
Wet Track Abrasion Test (1 hr.)	< 10	Pass	ASTM 3910

- (1) Tested using a ceramic panel following ASTM D 2939-25.1.1
- (2) Flexibility test (ASTM D 2939.16) performed at 23° C.
- (3) Wet flow test (ASTM D 2939.19) performed at an angle 10° above horizontal.

Specifications for base asphalt	Minimum	Results	Test Method
Flashpoint	> 450° F	Pass	ASTM D 92
Softening Point	> 140° F	Pass	ASTM D 36
Tire Rubber Content	10%	Pass	Supplier Report
Cone Penetration, 77°F, dmm	15	30	Supplier Report

Surface Preparation

1. Clean and fill all cracks 1/4" and larger with crack filler. Larger cracks may require several applications. For best results, it is recommended that all broken asphalt be removed and patched with new asphalt. It is also suggested that extreme low spots be filled with new asphalt. **New and replaced asphalt should cure for at least 180 days before application of GuardTop TRMSS.**

2. Sealcoats will not adhere to surfaces with excessive oil and grease. For a quality application, clean all oil and grease deposits with a degreasing solution using a stiff bristle broom or a power operated cleaner. Areas completely saturated are recommended to be removed and replaced with new asphalt. Then apply GuardTop Oil Seal to all oil and grease stained surfaces with a small broom insuring full coverage over the stain.

3. After all pavement repairs have been completed, the surface should be clean and free of all dirt, debris and loose graveled particles. Please note that dirt and loose debris will restrict the adherence of the sealcoat. To clean the surface, use a power



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broom, power blower and/or flush the surface with high pressure water.

4. It is recommended that the surface be sprayed with a mist of water in an amount that will leave the surface damp and free of standing water or puddles. The misting procedure is critical when the ambient temperature is hot and on bright sunny days or when the pavement is excessively aged and porous.

5. For excessively weathered surfaces, a primer or fog seal should be applied to the surface. The primer should consist of a 50/50 mixture of SS1-h and water. Apply the mixture to the surface by spray and let dry before applying GuardTop material.

Surface Compatibility

1. GuardTop TRMSS must be applied to asphalt pavement surfaces. TRMSS is not formulated for concrete, composite pavement, thermoplastic, or polymeric surfaces.

2. Before applying other products such as road slurry over the top of existing TRMSS you must ensure that there is sufficient void structure within the asphalt surface for proper adhesion. TRMSS must be allowed to wear for 2-3 years after initial application for this to occur. For best results GuardTop recommends reapplying TRMSS or any asphalt based sealcoat.

Application

GuardTop TRMSS material should not be further diluted with water. GuardTop TRMSS® is specifically formulated to provide superior performance and consistency without the need for added water. Apply GuardTop TRMSS using a truck mounted tank, wheeled container, or can. Spread in continuous parallel lines by means of rubber faced squeegees, brooms or spray technique. On excessively rough areas consult your manufacturer's representative.

GuardTop TRMSS should be allowed to dry a minimum of 24 hours before heavy traffic is permitted. Please note that when asphalt is cold, in shade or the ambient temperature is below 75°F, drying time may need to be extended. GuardTop TRMSS should not be applied in temperatures below 60°F and extra care should be taken in temperatures exceeding 105°F. Material should not be applied within 48 hours of forecasted rain, as rain may affect curing of asphalt sealcoat products.

Application Rates

The following table can be used as a guideline of GuardTop TRMSS coverage. Please note that this is only a guideline and exact coverage depends upon both the condition of existing pavement and the surface condition desired after application.

Surface Texture	Example Pavement	Gallons per square yard (one coat)	Gallons per square yard (two coats)
Extremely smooth surface	Fresh HMA	Consult manufacturer's representative	
Smooth dense surface		0.10 – 0.15	0.20 – 0.30
Medium surface	Slurry Seal?	0.12 – 0.18	0.24 – 0.36
Rough, aged surface	Chip Seal?	Consult manufacturer's representative	
Excessively rough surface		Consult manufacturer's representative	

Caution

Do not store in extremely warm conditions. Keep from freezing.

Packaging: 5 gallon pails, 55 gallon drums, 250 gallon totes, and bulk

GuardTop TRMSS® is covered by U.S. Patent No. 10,435,561 B2 and other pending applications and foreign patents.