Phoenix Gray
CoolSeal by GuardTop® RTU
Ready to Use, Solar Reflective
Asphalt Based Sealcoat

Revised May 2023

GuardTop's commitment to sustainability has guided the development of CoolSeal by GuardTop®. CoolSeal an ultra-high-performance, water-based, asphalt emulsion sealcoat designed to achieve lower asphalt pavement surface temperatures. CoolSeal is applied like conventional sealcoats to asphalt surfaces to protect and maintain the quality and longevity of the pavement. While most cool pavements on the market are polymer based, CoolSeal is a water-based, asphalt emulsion. Perfect for residential roads, parking lots and LEED-eligible building projects.

Specifications	Minimum	Maximum	Test Method
Typical Density-lbs./gal	9.5	12	ASTM D 2939.07
Nonvolatile Components by Weight	50%	70%	ASTM D 2939.08
Asphalt Content by Weight	10%	50%	ASTM D 2939.21
Fine Aggregate Content by Weight	32%	50%	GuardTop Report
Polymer Content by Weight	1.8%	50%	GuardTop Report
VOC Content by Volume	0%	3%	ASTM D 244-89
	Requirements	**Results**	
Solar Reflective Index (SRI)	> 33	Passes/Excellent	ASTM E 1980 ASTM E 903
Solar Reflectance (SR)	> 0.33	Passes/Excellent	ASTM C1549
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	Gray, unless tinted per customer	Pass	GuardTop Report
Cured Film	Gray, unless tinted per customer	Pass	GuardTop Report
Material Uniformity	Uniform	Pass	ASTM D 2939.05
Flashpoint	> 450ºF	Pass	ASTM D 2939.12
Softening point	> 210ºF	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
Resistance to Water	No Cracking	Pass	ASTM D 2939.15
Flexibility	Pass	Pass	ASTM D 2939.16 (1)
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 Flow	Uniformly homogenous	Report appearance and flow value	ASTM D 2939.19 (2)
Wet Track Abrasion (1 hr.)	< 20 g / sqft loss	Pass	ASTM 3910
Wet Track Abrasion (6 day)	Report	Report	ASTM 3910

(1) Flexibility test (ASTM D 2939.16) performed at 23° C.

(2) Wet flow test (ASTM D 2939.19) performed at an angle 10° above horizontal. Report visual appearance and consistency, looking for any contamination or deleterious material. Record and report flow, past the reference line.

Specifications for base asphalt	Minimum	Maximum	Test Method
Flashpoint	> 450° F	Pass	ASTM D 92
Softening Point	> 140° F	Pass	ASTM D 36

This product meets and exceeds the California Greenbook (2000) 203-9 specification (except dried film color)

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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 CoolSeal by GuardTop.**

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 not that dirt and loose debris will restrict the adherence of the sealcoat. To clean the surface, use a power 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. CoolSeal by GuardTop must be applied to asphalt pavement surfaces. CoolSeal 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 CoolSeal you must ensure that there is sufficient void structure within the asphalt surface for proper adhesion. CoolSeal must be allowed to wear for 2-3 years after initial application for this to occur. For best results GuardTop recommends reapplying CoolSeal or any asphalt based sealcoat.

Application

1. CoolSeal by GuardTop® RTU material should not be further diluted with water. CoolSeal by GuardTop® RTU is specifically formulated to provide superior performance and consistency without the need for added water. Apply CoolSeal by GuardTop RTU 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.

   It is required that two coats of CoolSeal by GuardTop be used during application to ensure a long lasting surface. One coat applications may not meet the performance specifications and are not covered by a manufacturers warranty.

2. CoolSeal by GuardTop RTU 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 75ºF, drying time may need to be extended. CoolSeal by GuardTop RTU should not be applied in temperatures below 60ºF and extra care should be taken in temperatures exceeding 105ºF. 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 CoolSeal by GuardTop RTU coverage. This table is based on two coat application of ready to use product. 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.

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Surface	Gallons Per square foot	Gallons per square yard
Extremely smooth surface	0.020	0.180
Smooth dense surface	0.0235	0.225
Medium surface	0.030	0.270
Rough, aged surface	0.035	0.315
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

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