

**1. PRODUCT NAME** OptiShield® Surface Seal

**2. MANUFACTURER** Canadian Shield / Seal Master has a nationwide network of manufacturing and distribution facilities.

Phone: 1-855-667-2868  
www.canadianshieldproducts.ca

**3. PRODUCT DESCRIPTION & BENEFITS**

OptiShield® Surface Seal is a Ready-To-Use clay stabilized asphalt emulsion featuring a unique combination of asphalt cement and specialized clay designed as a high performance surface treatment for asphalt pavements.

OptiShield® protects and extends the useful pavement life by replacing the vital surface oils, locking down the loose aggregates and preventing damage caused by oxidation, weather, and traffic. OptiShield® is an ideal choice to maintain residential streets, airports, highway shoulders, asphalt pavements, slurry seal and chip seal surface treatments. Excellent film integrity, bonding, ultra-violet and fuel resistant properties provide superior protection against traffic, oxidation, and other environmental stresses.

OptiShield® will not run onto adjacent concrete surfaces, resists traffic scuffing and tracking and retains a dark black non-glare colour.

**Basic Uses:** OptiShield™ is an excellent maintenance strategy for residential streets, airports, highway shoulders and other areas where value and performance are critical. Also ideal for maintaining slurry seal and chip seal surface treatments.

**Composition:** OptiShield® is a clay stabilized asphalt emulsion bituminous surface treatment fortified with adhesion promoters.

**Sizes:** OptiShield® is available in bulk tankers. 275-gallon totes, 55 gallon drums, and 5-gallon pails.

**Colour:** OptiShield® dries to a deep, rich black colour.

**Limitations:** Ambient and surface temperature must be at least 55°F and rising during application.

**Environmental Considerations:** OptiShield® contains no cutbacks, solvents, flammables, or coal tar. Contains less than 3% by volume VOC.

**4. INSTALLATION**

- Surface cracks must be clean and free from loose debris, dirt and dust.
- Cracks should be sealed with approved crack sealants.
- OptiShield® is designed to be applied by computer rate control asphalt spreader or standard sealcoat spray distributor trucks. Hand spray wand and sealer brushes may be used for smaller areas and trim.

**Mixing Procedures:**

OptiShield® is Ready-To-Use.

**DILUTION NOT RECOMMENDED.**

**Application Rate of Mixed OptiShield™:**

Apply OptiShield® at a rate of .10 to .14 gallons per square meter (**75-100 square feet per gallon**). Ultimate coverage will depend upon pavement age and porosity. OptiShield™ is provided Ready-To Use: **DO NOT DILUTE.** OptiShield® is applied as a one coat application.

**Drying Time:** Allow OptiShield® to dry thoroughly before resuming traffic. Under ideal conditions (70°F 50% relative humidity), OptiShield® will typically dry in less than 2 hours. Lower surface and ambient temperatures may result in longer drying times.

**Estimating Material Requirements:**

To estimate gallons of OptiShield® required to cover a specific area use the following coverage rate: **One litre of OptiShield® will cover approximately 1.8 to 2.5 square meters. (75 - 100 square ft. per gallon).** **Actual coverage rate may vary due to pavement age and porosity.**

**Precautions:** Both surface and ambient temperature shall be a minimum of 55°F and rising during application. Temperature shall not drop below 55°F in a 24 hour period following application. New asphalt surfaces should be allowed to cure a minimum of four weeks under ideal weather conditions (70° F) before applying OptiShield®.

**Keep Out Of Reach Of Children.** Do not store unopened drums or pails in freezing temperatures.

**5. AVAILABILITY & COST**

**Availability:** OptiShield® is supported by a nationwide network of Canadian Shield / SealMaster manufacturing facilities along with a national network of professional applicators.

**Cost:** Cost information can be obtained from a local OptiShield® applicator. Contact Canadian Shield / SealMaster for the OptiShield® representative in your area.

**6. WARRANTY**

Canadian Shield / SealMaster warrants that OptiShield® meets the chemical composition and performance requirements set forth in section 3. Liability to the buyer or user of this product is limited to the replacement value of the product only.

**7. MAINTENANCE**

Periodic cleaning of pavement surface will ensure optimum product service life.

**8. TECHNICAL SERVICES**

**Manufacturer:** Complete product specifications, material safety data sheets, and technical assistance is available from Canadian Shield / SealMaster.

**OptiShield® Professional Applicators:**

Your local OptiShield™ applicator is available to provide on-site inspections and recommendations to meet your specific needs.

**9. FILING SYSTEMS**

• Canadian Shield / SealMaster Online Specification at [www.canadianshieldproducts.ca](http://www.canadianshieldproducts.ca) / [www.sealmaster.net](http://www.sealmaster.net)

• Complete Seal Master Product and Equipment Catalog Available.

The statements made on this technical bulletin are believed to be true and accurate, and are intended to provide a guide for approved construction practices. Canadian Shield / SealMaster® does not make, nor does it authorize any agent or representative to make any warranty, express or implied, concerning this material as workmanship, weather, construction, equipment utilized and other variables affecting results are all beyond our control. Canadian Shield / SealMaster® warrants only that the material conforms to product specifications and any liability to the buyer or user of this product is limited to the replacement value of the product only. In no event shall Canadian Shield / SealMaster® be liable for any injury, loss or damage, either direct or incidental, special or consequential, however arising, in connection with material or equipment furnished or work performed. Canadian Shield / SealMaster® shall not, in any manner, be liable for any defects, variations or change in condition in the substructure over which its products are installed.

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TEST	METHOD	SPECIFICATION	RESULTS
<b>TEST EMULSION:</b>			
• Uniformity	ASTM D2939.05	<i>Product shall be homogeneous and show no separation or coagulation that cannot be overcome by moderate stirring.</i>	PASS
• Viscosity, Krieb Units	ASTM D562	45-75 KU	PASS
• Specific Gravity @ 60°F	ASTM D2939.07	>.9	PASS
• VOC Content by Volume %	ASTM D244-89	3% Max.	PASS
<b>RESIDUE:</b>			
• By Evaporation, %	ASTM D 2939.08	30% Min.	PASS
• Flash Point, °F	ASTM D 93	450 Min.	PASS
• Softening Point, °F	ASTM D 36	140 Min.	PASS
<b>PERFORMANCE TESTING:</b>			
• RESISTANCE TO HEAT	ASTM D 2939.14	No sagging or slipping beyond the initial reference line after 212°F exposure for 24 hours.	PASS
• RESISTANCE TO WATER	ASTM D 2939.15	No blistering or re-emulsification after 24 hour submersion in water.	PASS
• WET FLOW	ASTM D 2939.19	No flow beyond initial reference line.	PASS
• DIRECT FLAME TEST	ASTM D 2939.20	No continued combustion or slippage and run-down.	PASS
• WET FILM CONTINUITY	ASTM D 2939.22	A uniformly homogeneous consistency.	PASS
• RESISTANCE TO KEROSENE	ASTM D 2939.25	No evidence of leaking of kerosene, loss of adhesion and discoloration of tile.	PASS
• WETTRACK ABRASION	ISSA (TB-100)	Calculated weight loss, percentage of original volume, 1% Max.	PASS
• ACCELERATED WEATHERING	ASTM G 154	UVA-Weatherometer no cracking, chipping, surface distortion. No color fading or lightening.	PASS