SealMaster®
Pavement Products & Equipment

HAWAII ONLY
LIQUID ROAD ULTRA PAVEMENT SEALER

For Application on Roads.
Factory Blended with Aggregate

Technical Data Sheet

SMT-156

REVISED 08/02/18

PRODUCT DESCRIPTION

LIQUID ROAD ULTRA PAVEMENT SEALER FOR ROADS is a polymer-modified, fiber reinforced asphalt emulsion coating that contains specifically graded aggregate and is applied to bituminous pavement surfaces. Liquid Road Ultra is a ready to apply material that is factory blended with aggregate. Liquid Road Ultra is a highly durable, slip-resistant surface treatment that greatly extends pavement service life. Liquid Road Ultra Pavement Sealer meets ASTM D8099/ D8099M-17 Standard Specification for Asphalt Emulsion Pavement Sealer.

RECOMMENDED USES

Liquid Road Ultra is ideal for protecting and beautifying all types of pavement surfaces including Roads, Streets, Parking Lots, Shopping Malls, Driveways, Roadways and more. This particular specification pertains to Liquid Road Ultra application on Roads and Streets. (For application on parking lots, see SMT-155)

ESTIMATING MATERIAL REQUIREMENTS

One gallon of Liquid Road Ultra for application on Roads and Streets will cover approximately 30-40 square feet per coat (3.3 – 4.4 square yards per coat). Multi-coat application is recommended for optimum durability (See **APPLICATION PROCEDURES** below).

APPLICATION RATE

Apply Liquid Road Ultra for applications on Roads and Streets at a rate of 30-40 square feet per gallon per coat (3.3 - 4.4 square yards per gallon per coat). Application rates may vary due to pavement porosity and method of application.

TABLE 1-PHYSICAL REQUIREMENTS OF LIQUID ROAD ULTRA FOR ROAD APPLICATION

ASTM	TEST DESCRIPTION	RESULT
D2939-8	Residue by Evaporation, %	45-65%
E303	Measuring Surface Frictional Properties- British Pendulum Tester	Min. 60 BPN
E274	Locked Wheel Skid Testing	> 30 SN
D4060	Abrasion Resistance- Taber Abraser Dry Method	< 1% Loss
D3910-6.4	Wet Track Abrasion Test	< 25g/ft² Loss
D5	Penetration of Bituminous Materials-Base Asphalt	12-45 Pen
D113	Ductility of Bituminous Materials-Base Asphalt	5-15 cm
Std. %	Percent Polymer Solids to Asphalt by wt.	3% min.
E70	PH of Aqueous Solutions with Glass Electrodes	6-10 PH
D6378	Vapor Pressure (VPX), mm Hg @ 25° C (77° F)	22-26 mm Hg
D36	Softening Point of Emulsion Residue (Ring and Ball Apparatus)	> 200° F
D93	Flash Point of Liquid Emulsion	> 450° F
D562	Viscosity using a Stormer-Type Viscometer	60-110 KU
D870	Water Resistance of Coatings using Water Immersion	No Delamination
D6904	Resistance to Wind-Driven Rain	No Delamination
D4585	Water Resistance of Coatings Using Controlled Condensation	No Delamination
D1735	Water Resistance of Coatings Using Water Fog Apparatus	No Delamination
D2247	Water Resistance of Coatings in 100% Relative Humidity	No Delamination

TABLE 1-CONT.

D4541	Adhesion Strength over Asphalt Pavement	> 200 PSI
D2939-7	Weight per Gallon	10-12 lbs./gal
D2939-13	Drying Time- 50% humidity, 73.4 ± 3.6°F	2-6 Hrs.
D2939-14	Resistance to Heat- No Blistering, sagging or slipping	PASS
D2939-15	Resistance to water- No softening, delamination or re-emulsification	PASS
D2939-16	Flexibilty- No Cracking or Delamination	PASS
D2939-26	Resistance to Impact- No Chipping, Cracking or Delamination	PASS
D2939-27	Resistance to Impact After Accelerated Weathering	PASS
D4799	QUV UV Aging-1,000 Hours	No Color Fade
D3359	Measuring Adhesion by Tape- No More than a Trace of Peeling	PASS
Volatile Organic Compounds	Determination of Volatile Organic Compounds (VOC) in various Coatings	< 10 g/l
PAH Content (Percentage)	Polycyclic Aromatic Hydrocarbon Content (Percentage)	Less than one-tenth of 1% (< .10%)
D2939-5	Uniformity	PASS
D2939-22	Wet Film Continuity	PASS
D95	Water Content, %	35-55%
D2939-10	Ash Content of Residue, %	60-68%

SURFACE PREPARATIONS

Surface must be clean and free from loose material and dirt. Cracks should be filled with SealMaster Cold or Hot-Applied Crack Filling Materials. Oil stains should be cleaned and primed with SealMaster Oil Spot Primer.

APPLICATION EQUIPMENT

Liquid Road Ultra for Roads shall be applied by mechanical squeegee and or brush equipment. Equipment shall have continuous agitation or mixing capabilities to maintain homogeneous consistency of mixed material throughout the application process. Truck mount or self-propelled squeegee/brush equipment shall have at least 2 squeegee or brush devices (one behind the other) to assure adequate distribution and penetration of Liquid Road Ultra into bituminous pavement. Hand squeegees and brushes shall be acceptable in areas where practicality prohibits the use of mechanized equipment.

MIXING PROCEDURES

Mix Liquid Road Ultra thoroughly before applying. If needed, a small amount of water may be added to facilitate application.

APPLICATION PROCEDURES

To achieve optimum performance and the desired results for Liquid Road Ultra, it is important to follow proper application procedures. The following two coat process is recommended for optimum performance and durability:

1. Apply, by squeegee application, the first coat of Liquid Road Ultra at a rate of 30-40 square feet (3.3-4.4 square yards) per gallon. Allow first coat to dry thoroughly before applying the second coat.

LIQUID ROAD ULTRA PAVEMENT SEALER

For Application on Roads.
Factory Blended with Aggregate

SMT-156

REVISED 08/02/18

2. Apply, by squeegee application, the second coat of Liquid Road Ultra at a rate of 30-40 square feet (3.3-4.4 square yards) per gallon. Allow second coat to dry thoroughly before opening to traffic.

APPLICATION WEATHER CONDITIONS

Liquid Road Ultra shall not be applied when temperature is expected to drop below 50° F during application and for a period of at least 24 hours after application. Do not apply if rain is imminent or forecast within 12 hours.

LINE STRIPING AND TRAFFIC MARKINGS

Use SealMaster Traffic Paints for line striping and traffic markings.

PACKAGING AND AVAILABILITY

Liquid Road Ultra is available for plant pick up or bulk tanker load quantities. Liquid Road Ultra is supported by a national network of SealMaster manufacturing and distribution facilities along with a national network of qualified applicators.

WARRANTY AND DISCLAIMER

The statements made on this technical data sheet are believed to be true and accurate and are intended to provide a guide for approved application practices. As workmanship, weather, construction, condition of pavement, tools utilized, and other variables affecting results are all beyond our control, the manufacturer 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. The manufacturer expressly disclaims any implied warranties of merchantability or fitness for a particular purpose.

Tifton Physical Soil Testing Laboratory, Inc.
1412 MURRAY AVENUE
TIFTON, GEORGIA 31794
Phone: (229) 382-7292
Fax: (229) 382-7992
www.tiftonsoillab.com

ACCREDITED
TESTING CERT #1014.01

Date Received: July 14, 2017
Date Reported: July 18, 2017
Sample Number: L113A-17
Test Report For: Aggritek International Inc.
5490 S Rainbow Blvd
Las Vegas, NV 89118
Attn: Spencer Loh

RE: Greensmix/Topdressing Sand Test

PHYSICAL ANALYSIS[1]

MIXES ANALYZED (% by Volume)			SATURATED HYDRAULIC CONDUCTIVITY in/hr	POROSITY (%)			BULK DENSITY g/cm³	WATER RETENTION AT FIELD CAPACITY %	CHEMICAL	
SOIL	SAND	AMENDMENT		NON-CAPILLARY (air-filled)	CAPILLARY (water-filled)	TOTAL			pH[2]	EC[3] mmhos/cm
#60 White Silica Sand			59.3	31.0	12.8	43.8	1.49	8.6	6.1	
USGA Recommendations for a Topdressing Sand:			Minimum of 6 in/hr.	15 - 30	15 - 25	35 - 55				

PARTICLE DENSITY[4] 2.65 g/cm³

PARTICLE SIZE ANALYSIS

SAMPLES	GRAVEL 2 mm %	SAND FRACTIONS (% Retained)[5]					SAND[6] 0.05-2 mm %	SILT[6] 0.002-0.05 mm %	CLAY[6] <0.002 mm %	ORGANIC MATTER[7] % by wt.
		VERY COARSE 1 mm	COARSE 0.5 mm	MEDIUM 0.25 mm	FINE 0.15 mm	VERY FINE 0.05 mm				
#60 Sand	0.0	1.1	19.0	63.3	14.6	1.3	99.3	0.4	0.3	
		#10	#18	#35	#60	#100	#200			
			← Topdressing Sand →							
USGA Recommendations for a Topdressing Sand:	≤ 10% (≤3% gravel)		60% minimum		≤ 20%	≤ 5%		≤ 5%	≤ 3%	

Note: Total "fines" (very fine sand, silt, and clay) should be less than (<) 10% in a rootzone mix.

1. Determined at 30 cm tension by USGA testing protocol (ASTM F1815) 2. ASTM D4972 Method A (water only) 3. SSSA Soluble Salts 4. ASTM D854-98 5. ASTM C136 and F1632 6. Bouyoucos, 1962 7. ASTM F1647 Edited 5/12/2017

SealMaster®
Pavement Products & Equipment
Phone: 1-800-395-7325
www.sealmaster.net