

**PRODUCT DESCRIPTION & BENEFITS**

AsPen® Surface Seal is a clay-stabilized, mineral filled asphalt emulsion surface sealer featuring a unique combination of asphalt cement, surfactants and specialized clay designed as a high performance surface treatment for asphalt pavements. Aspen Surface Seal meets ASTM D8099/D8099M-17 Standard Specification for Asphalt Emulsion Pavement Sealer.

AsPen 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. AsPen 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.

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

**IMPORTANT** - Do not apply AsPen to smooth pavement. In order to maintain proper vehicle traction, AsPen should only be applied to pavement with sufficient porosity (roughness and profile) in order to maintain proper traction. AsPen depends on the existing roughness and profile of the pavement to maintain traction. AsPen is designed to be sprayed in a single coat application only at a rate that maintains the existing porosity of the pavement. Do not squeegee apply AsPen. Do not over apply AsPen. Do not apply more than the recommended coverage rate.

**USES**

AsPen 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**

AsPen is a clay stabilized asphalt emulsion bituminous surface treatment fortified with adhesion promoters.

**SIZES**

AsPen is available in bulk tankers, 275-gallon totes, 55-gallon drums, and 5-gallon pails.

**COLOR**

AsPen dries to a deep, rich black color.

**LIMITATIONS**

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

Physical Properties of AsPen as Supplied		
ASTM	Test Description	Result
D2939-5	Uniformity	PASS
D562	Viscosity, Kreb Units	80-140 KU
D2939-7	Density at 25°C [77°F], b/mL [lbs/gal]	8-10 lbs.
D244-89	VOC Content by Volume %	<10 g/l
D2939-8	Residue by Evaporation %	40-50%
D93	Flash Point °F	> 450° F
D36	Softening Point, °F	> 200° F
D2939-14	Resistance to Heat	PASS
D2939-15	Resistance to Water	PASS
D2939-19	Wet Flow	PASS
D2939-20	Direct Flame Test	PASS
D2939-22	Wet Film Continuity	PASS
D2939-25	Resistance to Kerosene	PASS
ISSA (TB-100)	Wet Track Abrasion	PASS
G154	Accelerated Weathering	PASS
D95	Water Content, %	40-60%
D2939-10	Ash Content of Residue, %	20-40%
D2939-13	Drying Time, Firm Set, h	2-6 hrs.
D2939-16	Flexibility	PASS

**ENVIRONMENTAL CONSIDERATIONS**

Environmental Properties		
PAH Content (Percentage)	Polycyclic Aromatic Hydrocarbon Content (Percentage)	Less than one-tenth of 1% (< .10%)
Volatile Organic Compounds (VOC)	Determination of Volatile Organic Compounds (VOC) in Coatings	Less than 10 g/l (< 1%)

AsPen contains no cutbacks, solvents, flammables, or coal tar. Contains less than 10 g/l VOC (< 1%)

**INSTALLATION**

- Surface cracks must be clean and free from loose debris, dirt and dust.
- Cracks should be sealed with approved crack sealants.
- AsPen® is designed to be applied with standard sealcoat spray equipment. At the ideal application rate, the applied material should completely soak into the pavement without leaving puddles of excess material. AsPen is designed to penetrate the pores of the asphalt while maintaining pavement profile for traction. The existing profile of the pavement must be maintained for adequate traction. AsPen is a single coat process.

## **ASPEN®** *Surface Seal*

**SMT-140**

**REVISED 03/30/18**

### **MIXING PROCEDURES**

For optimum results AsPen shall be mixed in accordance with the following mix design (based on 100 gallons for ease of calculation):

AsPen..... 100 gallons  
Water..... 50 gallons

### **APPLICATION RATE**

Apply properly mixed AsPen® at a rate of .12 to .18 gallons per square yard (50-75 square feet per gallon). Ultimate coverage will depend upon pavement age and porosity. AsPen® is applied as a one coat application. Do not apply two coats. Do not apply more than the recommended amount. Do not puddle or leave excess material on surface. AsPen is designed to penetrate the pores of the asphalt while maintaining the pavement profile.

Application Rate over Chip Seal: Apply properly diluted AsPen® at a rate of .18 to .2 gallons per square yard (45-50 square feet per gallon) over chip seal surfaces. AsPen® is applied as a one coat application. Do not apply two coats. Do not apply more than the recommended amount. Do not puddle or leave excess material on surface. AsPen is designed to penetrate the pores of the asphalt while maintaining the pavement profile.

Drying Time: Allow AsPen® to dry thoroughly before resuming traffic. Under ideal conditions (70°F 50% relative humidity), AsPen® 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 AsPen® required to cover a specific area use the following coverage rate:

One gallon of AsPen® will cover approximately 75 to 115 square feet per gallon (8.33-12.77 square yards per gallon). Actual coverage rate may vary due to pavement age and porosity.

Over chip seal, one gallon of AsPen® will cover approximately 67-75 square feet (7.44-8.33 square yards) when properly mixed and applied.

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

### **PACKAGING AND AVAILABILITY**

AsPen® is available in 5-gallon pails, 55-gallon drums and bulk tanker load quantities. AsPen® is supported by a national network of SealMaster manufacturing 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.



Phone: 1-800-395-7325

[www.sealmaster.net](http://www.sealmaster.net)