



SIP-1134™ is a penetrating asphalt seal coat that absorbs into the pavement matrix to form an internal moisture barrier, reducing permeability by 50% as validated in NRRRA testing at the Mn/ROAD facility (Project 202306). The clear-drying formulation achieves non-tracking conditions and full friction recovery within one hour of application per British Pendulum testing, while maintaining existing pavement marking retroreflectivity without restriping. Compatible with standard distributor spray equipment, the product can be applied at temperatures as low as 40°F and rising. Performance testing demonstrates effective prevention of moisture intrusion, oxidative aging, and crack propagation while preserving surface friction properties, providing a rapid-deployment preventative maintenance solution for asphalt pavements.

### PHYSICAL PROPERTIES

APPEARANCE	White to light yellow
SOLIDS CONTENT (%)	15
VISCOSITY @ 25°C	5-25 cP
DENSITY @ 25°C (g/cm <sup>3</sup> )	1
pH	7.1 (neutral)
ACTIVE ACRYLIC CON- TENT (%)	3.4
ACID VALUE (mg KOH/g)	0.11
RETURN TO TRAFFIC <sup>a</sup>	<30 min
STORAGE TEMPERA- TURE	40-80°F
SHELF LIFE	7 days diluted

### WHERE TO USE

- Newly-poured or mildly weathered asphalt
- Micro-porosity sealing applications

### KEY FEATURES

- Fast return to traffic (<30 minutes)<sup>a</sup>
- Restores/maintains surface friction
- No effect on pavement markings
- Improves flexibility/durability of crack/joint compounds
- Reduces permeability
- Water-based, non-silane
- Environmentally friendly

<sup>a</sup>In ideal weather conditions; applicator is responsible for confirming skid resistance

### APPLICATION RATES

#### Standard PCC Application:

15% solids at 0.025 gal/yd<sup>2</sup> (0.226 L/m<sup>2</sup>)

### APPLICATION GUIDANCE

#### Weather Requirements:

Pavement and ambient  $\geq 40^\circ\text{F}$  and rising  
Dry surface, winds <10 mph  
No rain expected before set  
Apply  $\geq 2$  hours before sunset

#### Surface Preparation:

Mechanically sweep  $\sim 30$  min before  
Hand broom depressions  
Cover utilities/iron before application

#### Equipment:

Standard distributor  
Ground speed interlock  
Uniform double-lap fan spray  
Nozzles oriented 15-30° equal height

### PACKAGING SIZE

- 5-gallon Pail
- 55-gallon Drums
- 275-gallon Tote
- Tanker (45,000 lbs.)





### FIELD-VERIFIED PERFORMANCE

Performance Aspect	Test Method / Observation	Results
Friction Restoration	ASTM E303 BPN and DFT	Improved skid resistance within minutes to 1 month
Pavement Markings	Reflectivity measurements on St. Michael test sections	No adverse effect on marking reflectivity
Freeze-Thaw	Freeze-thaw cycle testing	Over 10x more longevity compared to untreated pavement
Sealing Effect	Field permeability testing	Reduced permeability vs. controls
Return to Traffic	Field observations under favorable weather	Typically <30 minutes to no-track/open <sup>a</sup>
Permeability Reduction	Field permeability testing	50% reduction compared to untreated control

### SAFETY, HANDLING & LIMITATIONS

#### Storage & Handling:

Keep containers tightly closed. Heat and light sensitive - do not allow to freeze. Store cool and out of direct sun. Clean tools with water before material cures.

#### Limitations:

Not a structural repair. Do not apply over standing water or in freezing conditions. Confirm rate with test strip prior to full production.

### QUALITY ASSURANCE & DOCUMENTATION

Each production lot ships with a Certificate of Analysis listing viscosity (ASTM D445), density (ASTM D1475), pH (ASTM E70), and oil phase oxirane & acid value (AOCS methods). Follow lot-specific expiration as indicated on the CoA.

### WARRANTY & DISCLAIMER

The information herein reflects current knowledge and test data as cited. Because application conditions vary and are beyond SoyLei's control, no express or implied warranty is made as to results. Always verify rate and performance on a job-specific test strip and consult the SDS before use.

