



SIP-1133 is a fast-setting, water-based emulsion of reactive sealer, activated soybean oil, designed for topical pavement maintenance and sealing. The active biobased component penetrates the concrete pore network and reacts to seal those pores. Unlike traditional sealers, SIP-1133 does more than just surface chemistry, it penetrates deep into the pavement. The results show a clear improvement, over 10x the freeze-thaw cyclability compared to untreated samples.

PHYSICAL PROPERTIES

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

WHERE TO USE

- Newly-poured or mildly weathered concrete
- Micro-porosity sealing applications
- Various forms of outdoor concrete construction pavements and materials

KEY FEATURES

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

^aIn ideal weather conditions; applicator is responsible for confirming skid resistance

APPLICATION RATES

Standard PCC Application:

15% solids at 0.025 gal/yd² (0.226 L/m²)

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 ≥ 2 hours before sunset

Surface Preparation:

Mechanically sweep ~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 ^a

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.

