



SoyLei Innovative Products introduces SIP 1132-1, a pioneering emulsion crafted from chemically modified soybean oil meticulously engineered to synergize with asphalt products. Its formulation is tailored not just to decelerate the aging process but to innovatively reverse the effects of aging in asphalt. Leveraging the remarkable properties of modified vegetable oil, SIP 1132-1 transcends traditional applications, offering versatile utility in industrial settings as a dynamic component in coatings, additives, and topical asphalt treatments. Through its unique interaction and chemical reactivity with asphalt, SIP 1132-1 stands at the forefront of sustainable pavement innovation, providing a cost-effective, eco-conscious choice for extending the life and improving the performance of asphalt infrastructures.

## SIP 1111 CHARACTERISTICS

APPEARANCE	Beige	
SOLIDS CONTENT (%)	10-60	
ODOR	No Odor	
VISCOSITY @ 25°C	50-100 Cp	
BIODEGREABLE	YES	
DRY TIMES AT 70-80°F AND 50% HUMIDITY	Tack free	30 min
	Foot Traffic	1hr.
	Full cure	1-2 hrs.
pH	Neutral	
FREEZING POINT	32.0°F	
FLASH POINT	None	
SPECIFIC GRAVITY @ 25°C (lbs./gal)	8.1- 8.2	

ASPECT PROPERTIES	CONTROL (NO TREATMENT)	MARKET LEADER	SIP 1132	BENEFITS
COLOR GRAY SCALE	-	-	1 %	Improved the black color
GRANULE ADHESION	-	-17 %	50 %	Improves resistance to hail damage
TEAR STRENGTH REDUCTION	-	29 %	14 %	Decreased the tear resistance
PLIABILITY TESTING (55°F)	Fail	Pass	Pass	How brittle the shingles is from aging
FIRE RESISTANCE (BURN PATTERN)	-	-	-	Controlled the spread of fire per area
HAIL IMPACT	Pass	Fail	Pass	Maintains hail resistance

## PRODUCT USES:

- Asphalt Shingles
- Flat Asphalt Roof

## STORAGE AND HANDLING:

**Shelf Life:** 6 months with proper storage and handling.  
**Materials for Construction:** Compatible with carbon steel, 304/316 stainless steels, polyethylene, PVC, CPVC. Temperature limits for non-metallic materials should be considered.  
**Storage Conditions:** Ambient temperatures are ideal. Freezing occurs below 32°F; Optimum storage conditions is 60-110°F  
**Handling & Agitation:** Ensure **1132** is evenly mixed before use by stirring for 5-10 minutes with appropriate equipment or shaking smaller containers. If using a hold tank, agitate before dispensing. Air agitation is viable but should be used cautiously to prevent separation.  
**Pump Selection:** Centrifugal, gear, or diaphragm pumps suitable.

## MIXING AND APPLICATION:

- Add 1 Part **1132** concentrate to 2 parts water.
- Mix vigorously.
- After long term storage or if settling is noticed, mix again prior to use.

Apply Material: 200 ft<sup>2</sup> for every 1 gal of material

## PACKAGING SIZE:

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

