



SoyLei Innovative Products introduces APEX 1132, a concentrated chemically modified soybean oil emulsion engineered to react and restore asphalt roofing shingles. Its formulation is tailored to decelerate and chemically reverse aging effects in asphalt. It's the only product on the market built on internationally reviewed peer science and is the highest performing and most affordable roof rejuvenation treatment on the market.

SIP 1132-1C CHARACTERISTICS

| | |
|-----------------------------|-----------------|
| APPEARANCE | White |
| SOLIDS CONTENT (%) | 60 |
| ODOR | No/Minimal Odor |
| VISCOSITY @ 25°C & 50/s | 200-1000 Cp |
| BIODEGRADABLE | YES |
| DRY TIMES @ 70-80°F, 50% RH | |
| 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 | 0.98 |

PRODUCT USES:

- Asphalt Shingles

PACKAGING SIZE:

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

STORAGE AND HANDLING:

Shelf Life: 6 months with proper storage.

Materials: Compatible with carbon steel, 304/316 stainless steels, polyethylene, PVC, CPVC.

Storage: Ambient temperatures ideal. Freezing below 32°F; Optimum 60-110°F.

Handling: Mix before use by stirring 5-10 minutes. If using hold tank, agitate before dispensing.

Pumps: Centrifugal, gear, or diaphragm pumps suitable.

MIXING AND APPLICATION:

- Mix after long storage if settling occurs
- Add and mix 5 parts water to 1 part concentrate
- Spray on surface using a spray applicator

Apply Material: 200 ft² per gallon

ASPECT PROPERTIES AND PERFORMANCE:

| Aspect Properties | Control (No Treatment) | Market Leader | SIP 1132 | Benefits |
|---------------------------|------------------------|------------------------|--------------------------|---|
| Sun Bleaching | - | Short-Term Improvement | Long-Lasting Improvement | Healthier, newer looking shingle |
| Granule Adhesion | - | 17% | 50% | Improved resistance to hail damage |
| Tear Strength | 100% | 70% | 86% | Lower reduction of tear strength |
| Pliability Testing (55°F) | Fail | Pass | Pass | How brittle the shingles is from aging |
| Flame Spread (in) | 42 | 30 | 15 | Reduces the spread of flame |
| Hail Impact | Pass | Fail | Pass | Maintains hail resistance. Pliability increase and grit retention don't trade off ability to resist deformation |

