



# SPI COATINGS

PROVEN PERFORMANCE • REAL WORLD SOLUTIONS

## SP LIQUID MEMBRANE

**INSULATION  
AND  
CORROSION  
SPECIALISTS**

### Technical Data Sheet (05/29/19)

#### **DESCRIPTION**

SP LIQUID MEMBRANE is a tough, one-part elastomeric hydrocarbon rubber compound coating that is loaded with a ceramic pigment for strength. Upon curing, SP LIQUID MEMBRANE provides a protective coating film of superior adhesion and flexibility, and is resistant to abrasion and impact. SP LIQUID MEMBRANE can be used as a primer, as a one-coating system or as a topcoat to seal SUPER THERM from ponding water. SP LIQUID MEMBRANE can be applied over pressure-washed substrate of TPO, EPDM, PVC, wood, concrete or metal.

#### **TYPICAL USES**

- As a protective coating on metal, concrete, wood, etc. to add water resistance and longevity.
- As a one-coat system on new or existing roofs, and other commercial/industrial surfaces with minimal surface preparation.
- As a moisture protective membrane to stop moisture penetration, contaminants, and mold and mildew.
- Top coat in a thin film over the HPC and HSC to protect them from weathering, water and to help guard from abuse during normal operations.

#### **APPLICATION METHODS**

SP LIQUID MEMBRANE can be applied to concrete, EPDM, TPO, PVC, wood, metal or masonry substrates. The coating can be applied by spray, brush or roller. For specific instructions on surface preparation, mixing and application, please refer to the SPI's application instructions for SP LIQUID MEMBRANE (millage may vary due to surface profile), and what is required of the coating.

**NOTE:** This product must not be applied on or within 2 inches of chlorinated rubber.

**NOTE:** Never use mineral spirits to prep surfaces or to thin this product.

**NOTE:** SP Single-Ply Primer must be used to prime PVC, TPI and EPDM prior to applying SP Liquid Membrane.

#### **PHYSICAL DATA**

- ◆ Solids: By weight 67.4% / By volume 59.8%
- ◆ 60 MINUTES TO TACK FREE AT 70°F (21°C)
- ◆ Overcoat window is unlimited
- ◆ Lead and chromate free
- ◆ Net Weight: 8.3 lbs. per gallon
- ◆ Viscosity: KU141

- ◆ VOC Level: 3.5/lbs. per gal/419 grams/liter
- ◆ Shelf Life: Up to 3 years (unopened) under appropriate storage condition (see MSDS)
- ◆ One component coating; No curing agent needed
- ◆ Tensile strength: 1765 psi
- ◆ Elongation: 512% / Permeance: 7.3
- ◆ ASTM 6083 Testing: Pass
- ◆ Tear Resistance: 351 lbf/in
- ◆ Fungi Resistance Rating "0"
- ◆ Low temp flex -15°F: Pass
- ◆ 1000-hour accelerated weathering: Pass
- ◆ White in color; available in colors per minimum order requirement
- ◆ Maximum Surface Temperature when applying; 150°F (65°C)
- ◆ Minimum Surface Temperature when applying; 50°F (10°C)
- ◆ Maximum Surface Temperature after curing; 160°F (71°C)
- ◆ Failure will occur at a constant temperature equal to or greater than 325°F (163°C); consult SPI for intermittent temperatures greater than 160°F (71°C)
- ◆ Can be applied over damp to wet surfaces
- ◆ Resistant to animal fats
- ◆ Cannot be applied directly over foam; use SUPER THERM to separate

#### **SAFETY PRECAUTIONS**

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: proper ventilation, use of proper lamps, wearing of protective clothing and masks, tenting, and proper separation of application areas. This coating is flammable. Keep away from fire, or other sources of ignition. For more specific safety procedures, please refer to the SP LIQUID MEMBRANE Material Safety Data Sheet. **KEEP OUT OF REACH OF CHILDREN.**

LIMITATION OF LIABILITY: The information contained in this data sheet is based upon tests that we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the products made by SPI, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge is reliable. The products and information are designed for users having the requisite knowledge and industrial skills, and the end-user has the responsibility to determine the suitability of the product for its intended use.

SPI has no control over either the quality of condition of the substrate, or the many factors affecting the use and application of the product. Therefore, SPI does not accept any liability arising from loss, injury, or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

The information contained in this data sheet is subject to modification as a result of practical experience and continuous product development. This data sheet replaces and annuls all previous issues and the user has the responsibility to ensure that this sheet is current prior to using the product.



# SP LIQUID MEMBRANE

## Application Instructions (1/3/23)

SP LIQUID MEMBRANE is a solvent-based rubber, spray-able coating designed to provide a 20-mil waterproofing membrane that can seal over cracks, pinholes and around pipes or protrusions over any type of roofing or walls. It can also be used within a roofing system, as specified.

### SURFACE PREPARATION

Surface must be clean from oil, tar, rust, grease, salts, and films.

- 1) Use general degreaser if needed.
- 2) Clean surface using TSP (tri-sodium-phosphate) or a citrus cleaner to release dirt and degreaser residue.
- 3) Pressure-wash if possible @ 3500 psi.
- 4) Salt contamination on a surface can come as a result of salt water, fertilizers, and car exhaust. Use Chlor\*Rid or equivalent to decontaminate surface if salts are present. Acceptable levels: Nitrates: 5-10 mcg/cm<sup>2</sup>, Sulfates: 5-10 mcg/cm<sup>2</sup>, Chlorides: 3-5 mcg/cm<sup>2</sup>
- 5) SP LIQUID MEMBRANE must be applied during proper temperatures and the prescribed overcoat window of the coating over which it will be applied.
- 6) If applied over an existing coating having a glossed or shiny finish, it must be sanded and roughed to remove gloss before application, to improve the profile.
- 7) SP LIQUID MEMBRANE can be applied at any time.

### USES

- 1) As a one-coat system (20 mils dry/40 mil wet/40 sq.ft./gallon)
- 2) As a base coat for Super Therm (10 mils dry/18 wet mils/90 sq.ft./gallon)
- 3) As a top coat for ponding water (3.0 mils dry/6 mil wet/250 sq.ft./gallon)

### MIXING

- 1) Mix by hand or with a power drill using low-medium speed.
- 2) When the container is opened, the coating will be a clear solvent on top. Mix continuously until the entire surface of the coating turns a solid color. Once the coating color has turned completely uniform, mix for two more minutes making sure all paste is off of the bottom.

**NOTE:** For start & stop (lunch), put gun into solvent pail and cover unused product pail with cloth or plastic to prevent evaporation of solvents.

### POT LIFE

8 hours at 70°F degrees (21°C) at 60% or higher Relative Humidity. Cooler temperatures; longer pot life. Warmer; shorter pot life.

### APPLICATION

- 1) SP LIQUID MEMBRANE can be applied by soft bristle brush or ½-3/4" nap roller made for solvent use or spray. If application is by spray, use a standard airless sprayer (2.0 gallons/minute at 3,300 psi) with a .035 tip.
- 2) Overcoat with other coatings at any time. No special requirements for over-coating.
- 3) If thinning is necessary: MEK would be the best, most compatible choice.. Xylene is the next best choice. Keytones can be used, if necessary, but will tend to evaporate more quickly.

**NOTE:** Solids by volume should be kept as high as possible, therefore, start at 10% dilution rate and check to see if thinning is adequate. Add more if needed. A 20% dilution should be the maximum to thin the product, but be aware that the solids by volume has changed and additional wet thickness will need to be applied to achieve the proper spread rate and proper dry mil thickness.

### APPLICATION NOTES

- 1) The number of coats necessary and the thickness of each will be in accordance with the job specifications.
- 2) Temperatures must always be a minimum of 45 degrees.
- 3) Dries extremely fast when applied in direct sunlight at 90°F or higher temperatures. May set up in 5-10 minutes.
- 4) SP Single-Ply Primer must be used to prime PVC, TPO and EPDM prior to applying SP Liquid Membrane.
- 5) HIGH-HEAT SYSTEM: a) HPC applied over hot surface at thickness according to temperature level, b) RUST GRIP applied @ 150sf (145sm) for toughness, then c) SP LIQUID MEMBRANE for water/air seal plus rubber flex for movement.

### CURE TIME

- 1) 30-60 minutes to tack-free when 70°F. (21°C).
- 2) Fully cures in thirty days when 70°F (21°C).
- 3) Dries extremely fast when applied in direct sunlight at 90°F or higher temperature. May set up in 5-10 minutes.

### CLEANING EQUIPMENT

- 1) If breaks are taken, spray systems should be flushed with solvent. Always use Xylene to clean equipment. Do not use Acetone as it will cause product to clot.
- 2) After completion, spray system should be flushed and cleaned with solvent.
- 3) After completion, brushes and rollers should be discarded.
- 4) Unlike other types of rubber coatings, the application can start and stop using the steps above without the normal problems of the coating setting up in the hoses, gun and machine. It is very applicator-friendly.

# SAFETY DATA SHEET

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## SECTION 1: Identification of the substance

- 1.1 PRODUCT IDENTIFIER: SPLIQUID MEMBRANE(0419)  
GHS PRODUCT IDENTIFIED: Global Harmonized System#3208.90.0000
- 1.2 PRODUCT USE: For roofing; waterproofing/sealer
- 1.3 SUPPLIER: SUPERIOR PRODUCTS INT'L, INC.  
10835 W. 78th St., Shawnee, KS 66214 USA
- 1.4 EMERGENCY TELEPHONE NUMBER: 800-424-9300; 202/483-7616

## SECTION 2: Hazard identification

- 2.1 Classification of the substance: This product is a flammable, solvent-based coating and should be treated according to all known safety precautions.

- 2.2 Label elements: Signal Word: DANGER

Hazard Symbol:



Hazard Statement: Flammable liquid and vapor. Harmful in contact with skin. May cause cancer. Causes eye irritation. May cause respiratory irritation or damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

## SECTION 3: Composition/information on ingredients

3.2	<u>Ingredient compositions</u>	<u>%</u>	<u>CAS/PIN</u>	<u>TLV</u>
	ParaChloroBenzoTriFluoride	28.5	98-56-6	N/A
	Aromatic 100	15.7	64742-96-6	25
	Toluol	7.31	108-88-3	20

## SECTION 4: First aid measures

- 4.1 Description of first aid measures  
INHALATION: Remove to fresh air. Give oxygen if required. Seek medical help, if needed.  
EYES: Flush w/water for at least 15 minutes; see physician.  
SKIN: Remove contaminated clothing; wash affected areas w/mild soap & water.  
INGESTION: Do not induce vomiting. Give 1-2 glasses milk or water. Seek medical attention according to amount of product ingested.

## SECTION 5: Firefighting measures

- 5.1 Extinguishing media: Foam, dry chemical, carbon dioxide; water fog to cool containers exposed to heat.
- 5.2 Special hazards arising from the substance or mixture:  
Hazardous combustion products: Carbon monoxide, isocyanate-based fume  
Autoignition Temperature.: >499C. degrees Minimum ignitions energy: 6.1%  
Flash point: 41C. TCC Flammable limits: (Lower) 1.4% / (Upper) NAV%  
Sensitivity to static discharge? Yes  
Sensitivity to mechanical impact? Possible, due to aluminum content  
Conditions of flammability: Spraying/activities that create fine mist
- 5.3 Advice for firefighters: Firefighters should wear full-body protection & SCBA

## SECTION 6: Accidental release measures

- 6.1 Personal precautions: Use protective clothing; use non-sparking tools. Product may form flammable vapour-air mixture so take measures against build up of static discharge.
- 6.3 Methods of cleanup: Use kitty litter or similar absorbent to contain spill. Neutralize w/solution of 80% water/20% Tergitol TMN-10.

## SECTION 7: Handling and storage

- 7.1 Precautions for safe handling: Ground all containers; use non-sparking tools. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.
- 7.2 Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition. Keep away from children.

**SECTION 8: Exposure Controls/personal protection**

8.1 Control parameters: To be worn when spraying or within contained areas--Half-face respirator w/organic vapor filter, safety glasses w/shields, PVA or nitrile chemical-resistant gloves, skin protection; for all other applications, good judgement should be used.  
ENGINEERING CONTROLS: To spray, mechanical exhaust ventilation is required.

**SECTION 9: Physical and Chemical Properties**

9.1 Information on basic physical and chemical properties:  
 PHYSICAL STATE: Liquid SOLUBILITY IN WATER: Insoluble pH: NAP  
 APPEARANCE AND ODOR: White liquid, solvent odor FREEZING POINT: NAP  
 BOILING POINT: NA SPECIFIC GRAVITY: 1.23 ODOR THRESHOLD: 0.4ppm  
 COEFF. WATER/OIL: NAV EVAPORATION RATE: 0.82% VOLATILES: 59  
 VAPOUR DENSITY (Air=1): NAV VAPOUR PRESSURE: 8mmHg@20C.deg. CORROSIVE: NO

**SECTION 10: Stability and reactivity**

10.1 Conditions of Reactivity: oxidizers 10.2 Conditions of Instability: Stable  
 10.3 Possibility of hazardous reactions: None known. 10.4 Conditions to avoid: None known.  
 10.5 Incompatible materials: None known  
 10.6 Hazardous decomposition products: Combustion will produce carbon dioxide, possible carbon monoxide

**SECTION 11: Toxicology Information**

11.1 Information on toxicological effects:  
Acute toxicity - oral: If swallowed: HARMFUL OR FATAL - Causes chemical burns of mouth and stomach; corrosive to gastrointestinal tract; Paleness and cyanosis of the face; Excessive fluid in the mouth and nose; Bloating of stomach and belching; Nausea and vomiting; Risk of chemical pneumonitis and pulmonary edema  
Acute toxicity - inhalation: Vapors or mist can cause irritation. Smokers or people with lung problems may be more affected. Prolonged or repeated breathing or swallowing of large amounts may cause liver and kidney damage based on animal studies.  
Acute toxicity - dermal: May cause TEMPORARY skin discoloration and irritation. May cause severe eye damage.  
Health effects to over exposure to CONCENTRATE: May cause irritation by all routes of exposure. May produce symptoms of central nervous system depression including headache, dizziness, nausea, loss of balance and drowsiness

**SECTION 12: Ecological Information**

12.1 Toxicity  
 Air: 3.17 lbs./gallon; 380 grams/liter VOC\* (see other)  
 Water: Insoluble in water; reacts slowly w/water forming polyurea polymer and liberating CO2 gas  
 Soil: Lead- and chromate-free, not hazardous under RCRA 40CFR

**SECTION 13: Disposal considerations**

13.1 Waste treatment methods: Dispose of as paint/aluminum waste according to local regulations.

**SECTION 14: Transport information**

14.1 UN number: 1263 14.2 UN proper shipping name: Paint Related Material  
 14.3 Transport hazard class: Class 3 14.4 Packing Group: III  
 Product is considered hazardous material, to be handled according to IATA regulations

**SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance: No listed materials under Superfund Amendments & Reauthorization Act of 1988 (SARA) 302, 304, 311, 312. Meets European codes under Article 59(10) of the Reach regulation. California Proposition 65 Reproductive Toxins: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**SECTION 16: Other information**

\*Product is compliant with many national and local VOC content regulations. However, because manufacturer is not familiar with all local VOC requirements, the user is responsible for understanding the local VOC rules and for verifying that the product selections meet the most current VOC requirements of the area in which the products are to be used.