

# PRODUCT DATA BULLETIN II

## ADHESIVE #9

### DESCRIPTION AND PURPOSE:

SWEPCO Adhesive #9 is a specially prepared roofing glue manufactured from "Heart of Texas" Asphalt, a plasticizing adhesive resin, High Strength Micro Fibers and Zonamine, a special chemical additive which improves bondability. It is designed to provide a flexible, solid bond between the roof deck and successive layers of asphalt roofing membranes, such as SWEPCO's Heavy Duty PolyPly and most types of asphalt roll roofing.

### OUTSTANDING FEATURES:

#### HELPS ELIMINATE COMMON BONDING PROBLEMS

Successful performance of a built-up roof system depends greatly upon the adhesive used to bond the system components together. Many premature roof failures, such as open seams and other forms of delamination, are caused by inadequate adhesive, incorrect use of adhesive or relying upon one material to do more than one roofing function. These common bonding problems can be greatly minimized with SWEPCO Adhesive #9, a cold applied adhesive designed specifically for this critical roofing function.

#### SUPERIOR INGREDIENTS INSURE SUPERIOR PERFORMANCE

SWEPCO Adhesive #9 gives installed roof membranes superior resistance to cracking, splitting and tearing because it stays flexible and pliable longer. Its

outstanding performance is a direct result of quality ingredients and meticulous processing. SWEPCO's own "Heart of Texas" Asphalt, a premium quality waterproofing asphalt especially selected and refined for superior flexibility, bondability and weatherability, is the most important ingredient.

It is fortified with Zonamine, a highly effective SWEPCO chemical additive, which helps insure durable, uniform bondability, the most critical area of performance for a roofing adhesive.

Thermal stability comes from High Strength Micro Fibers. These highly effective stabilizing fibers, provide superior flexibility and outstanding resistance to hot weather flow, two very important properties for an adhesive. If the adhesive becomes too fluid, it can allow the roofing membrane to shift. If the adhesive is too brittle, it will resist normal roof motion, weakening or breaking its bond.

A special plasticizing resin is used to enhance the natural flexibility and tackiness of SWEPCO Adhesive #9. This resin improves the plastic quality of the adhesive, allowing it to absorb expansion and contraction readily when exposed to rapid temperature changes. It also improves the adhesive quality of the product, improving resistance to destructive shearing forces.



EASIER, MORE  
CONTROLLED APPLICATION

SWEPCO Adhesive #9 is applied straight from its container. No heating, thinning or mixing is required. It sets up to the proper degree of tackiness in minutes, but remains "workable" for any adjustments that may be re-

quired after initial placement. This eliminates the haste created by hot applied adhesives that causes mistakes to be "buried" in the roof system. The ease, speed, versatility and workability of SWEPCO Adhesive #9 saves time and labor costs.

## GENERAL DATA:

### TYPICAL PHYSICAL PROPERTIES

Viscosity, Stormer, @77°F (25°C), KU (ASTM D-562)	135-145
Specific Gravity, @60°F (15.5°C) (ASTM D-70)	1.008
Unit Weight, lb/gal (ASTM D-70)	8.4
Unit Weight, kg/liter (ASTM D-70)	1.008
Drying Time, to Touch, hours	1-2
Drying Time, Through, hours	24
Flash Point, P-M, °F (°C) (ASTM D-93)	105 (40.5)
Wet Film Thickness, 1 gal/100 ft <sup>2</sup> , mil (Calculation)	16
Wet Film Thickness, 1 liter/m <sup>2</sup> , mm (Calculation)	1
Dry Film Thickness, 1 gal/100 ft <sup>2</sup> , mil (Calculation)	9.1
Dry Film Thickness, 1 liter/m <sup>2</sup> , mm (Calculation)	0.57
Color (Observation)	Black
Odor (Observation)	Petroleum

### TYPICAL PERFORMANCE PROPERTIES

Workability (ASTM D-4479, 6.2)	Permits application by squeegee, brush, roller or spray
Behavior, @140°F (60°C) (ASTM D-4479, 6.3)	No blistering, sagging or slide greater than .25 in. (6 mm)
Pliability, @32°F (0°C) (ASTM D-4479, 6.4)	No cracking or separation
Adhesive Strength After 1 Hour, N (CSGB 37-GP-4M, 63.2)	35
After 24 hours, N (CSGB 37-GP-4M, 63.2)	75
Adhesion to Dry Surfaces (ASTM D-3409)	Excellent
Accelerated Weathering, hours (ASTM G-53)	4,000*
Film Appearance	Good
Peeling and Chipping	None
Erosion	Slight
Water Penetration	NIL
Chalking	None
Storage Stability	Indefinite
Settling (SS-A-00694D)	NIL

### TYPICAL CHEMICAL PROPERTIES

Non Volatiles, % wt (ASTM D-4479, 8.2)	67
Volatile, % wt (ASTM D-4479, 8.2)	33
Asphalt Portion Soluble in CS <sub>2</sub> , % wt (ASTM D-4)	99.9
Water Contents, % wt (ASTM D-95)	NIL
Resistance to Mild Acid and Alkali	Good
Resistance to Water	Excellent
Resistance to Petroleum Solvents	Poor
Asphalt Resins, % wt (ASTM D-4)	55
Petroleum Solvents, % wt (ASTM D-4479, 8.2)	33
Mineral Stabilizers and Additives, % wt (ASTM D-4479, 8.2)	12

### APPLICABLE SPECIFICATIONS

ASTM Designation D-3019-87, Type III  
Canadian Government Specification 37-GP-4M

\*NOTE: This is roughly equivalent to eight years of exposure to ultra-violet radiation, heat and moisture generally encountered in field service.

## APPLICATION INFORMATION:

**IMPORTANT:** SWEPCO Adhesive #9 is a premium quality asphalt roofing glue designed to provide flexible, secure bonding between approved roof decks and/or multiple plies of asphalt roofing membranes, such as SWEPCO's Heavy Duty PolyPly and most types of asphalt roll roofing. It is formulated for use on smooth asphalt, coated organic roll roofing, inorganic felt, primed concrete and approved rigid board insulation (except polystyrene types). It is not designed for use on nor should it be applied directly to uncoated organic roofing felt or papers, coal tar pitch, polystyrene or sprayed-in-place polyurethane insulation, wood or slate. It is used in a number of SWEPCO Roof Maintenance and Built-Up Roof Systems. The instructions provided here refer to this product only. For complete application instructions, consult the appropriate system installation literature.

**PREPARATION:** The roof surface should be sound and should drain water freely. Because standing water accelerates deterioration of all asphalt roofing products, every effort should be made to isolate and correct the causes of any standing water or ponding on the roof. A minimum slope of 1/4 in. per foot (2%) is recommended. When this is not possible, SWEPCO Products can still be applied and will provide temporary protection for such areas. However, it must be understood that performance of SWEPCO Products cannot be guaranteed in any area of the roof subject to standing water. If SWEPCO Adhesive #9 is to be used to bond roll roofing to a roof deck, the deck must be clean and dry and must meet all requirements contained in the brochure "SWEPCO Built-Up Roof System General Specifications" prior to application. If used to bond new roofing membrane materials to existing roof membranes, the existing roof surface must be sound, smooth, clean and dry. Any imperfections which might inhibit proper contact between the new and old materials must be removed. Any gravel must be spudded or scraped off the roof to provide an absolutely smooth surface.

**APPLICATION:** SWEPCO Adhesive #9 is applied straight from the container with standard roofing brushes, squeegees or airless spray equipment at the minimum coverage rates recommended below. It requires no heating, thinning or mixing. In cold weather, it can be brought to application consistency by storing container in a warm room for 72 hours or more prior to usage. After a sheet of roofing has been initially positioned in the adhesive, lift one end about 6 in. (15.24 cm) off the roof and exert a slow, uniform pull to slide the roll roofing 6 to 12 in. (15.24 to 30.48 cm) through the adhesive. This helps insure even distribution to both surfaces being bonded together and stretches the membrane to help eliminate wrinkles and fishmouths. Installed plies of roofing membrane should be rolled with a heavy roller to insure maximum bonding. (For specific information concerning spray application contact Southwestern Petroleum Corporation.)

**APPLICATION PRECAUTIONS:** Do not apply to wet or damp surfaces. Do not use wet, damp or torn roofing papers. Do not use with uncoated organic reinforcing felts or papers.

### MINIMUM COVERAGE RATES:

Spudded Gravel Surfaces .. -- 3.0-4.0 gal.  
per 100 sq. ft. (1.22-1.63 liter/m<sup>2</sup>)  
Uncoated Inorganic Felt -- 2.0-2.5 gal.  
per 100 sq. ft. (0.82-1.02 liter/m<sup>2</sup>)  
Coated Roll Roofing -- 1.5-2.0 gal. per  
100 sq. ft. (0.61-0.82 liter/m<sup>2</sup>)

**NOTE:** These coverage rates are minimum coverage rates. Do not under apply the product as this can adversely affect product performance and will negate any guarantee to which the product may be subject. Please note that actual "material requirements" may differ from these minimum coverage rates due to lapping of roofing papers. Consult installation instructions for the appropriate SWEPCO Roof System for actual material requirements.

**CURING:** SWEPCO Adhesive #9 reaches the proper degree of tackiness in minutes, but remains workable for several hours depending on temperature and humidity.

**CLEAN-UP:** SWEPCO Adhesive #9 can be removed from tools and other areas with kerosene or mineral spirits.

## APPLICATION INFORMATION

(Continued)

**ADDITIONAL INFORMATION:** For additional information or recommendations, write: Southwestern Petroleum Corporation, P.O. Box 961005, Fort Worth, Texas 76161-0005; Southwestern Petroleum Canada Ltd., 87 West Drive, Brampton, Ontario, Canada L6T 2J6; or N.V. Southwestern Petroleum Europe S.A., P.O. Box No. 3, B-2390 Oostmalle, Belgium.

### SAFETY PRECAUTIONS

HARMFUL OR FATAL IF SWALLOWED - IRRITANT - COMBUSTIBLE

Contains Naptha & Other Petroleum Distillates

Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wear protective goggles, gloves and clothing. Avoid prolonged breathing of vapors. Use with adequate ventilation or approved respirators in confined areas. Do not take internally. Store and use away from heat, open flame or spark sources. Close container tightly after each use. Do not transfer to unlabeled or breakable containers. Use only for purposes intended. Keep out of reach of children.

### EFFECTS OF OVER EXPOSURE:

Contact with eyes or prolonged or repeated contact with skin can cause irritation and inflammation. Prolonged breathing of vapors can cause respiratory difficulty, dizziness, headache, nausea, irritation of nose or throat, drowsiness, fatigue, pneumonitis, pulmonary edema or central nervous system depression. Ingestion can cause symptoms similar to inhalation; aspiration into lungs can cause serious injury or death.

**FIRST AID PROCEDURES:** Eye Contact - Flush with water for 15 minutes. If pain or redness persists, seek medical attention immediately. Skin Contact - Wash with soap and water after wiping off excess material. If irritation persists, seek medical attention. Inhalation - Remove to fresh air. If breathing difficulty persists, give oxygen or resuscitate and SEEK MEDICAL ATTENTION IMMEDIATELY. Ingestion - Do NOT induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration. SEEK MEDICAL ATTENTION IMMEDIATELY.

**PHYSICAL EMERGENCY PROCEDURES:** If ignited, extinguish with CO<sub>2</sub> or dry chemicals. Water or foam may cause frothing. Water may be used to keep containers cool or flush spills away from area of involvement.

Consult Material Safety Data Sheet (MSDS) for this product or call Southwestern Petroleum Corporation at (817) 332-2336 for further health and safety information.

