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TECHNICAL DATA SHEET

SOLARITE PU-2977 THERMAL POLYMERIC ELASTOMER SEALANT

DESCRIPTION: SOLARITE PU-2977 is a two-component flexible thermal polymeric elastomer meeting Specification MIL-C-82633 (OS) for potting bomb tail pads.

PHYSICAL PROPERTIES:

	<u>Part A</u>	<u>Part B</u>
Color.....	Black	Black
3.2.1 Specific Gravity.....	0.91 +/- 0.03	0.96 +/- 0.03
Viscosity, CPS (Centipoise) @ 75°F.....	7,200 Max	12,000 Max
Flashpoint.....	500°F Min	400°F Min
3.2.2 Exothermic Temperature.....		90°F - 95°F
3.2.3 Gel Time (200 g's @ 75°F) ASTM-D-2471-68.....		4.5 - 7.5 Minutes
3.2.4 Slump Test (3 oz. TW @ 75°F) MIL-C-82633).....		Passes
3.2.5 Alkalinity.....		Passes
3.2.6 Acidity.....		Passes
3.2.8 Stability.....		Passes
3.3.1 Resistance to Cold Temperature....		Passes
3.3.2 Compression: +160°F..... - 65°F.....		Passes Passes
Maximum Volatile Organic Content (VOC) g/l.....		- 0 -
Durometer, ASTM-D-2240.....		25 - 32 A

USE INSTRUCTIONS:

- 1) Pre-mix contents of each container before use to ensure the entire contents are uniform. Some settling may occur upon prolonged storage, which is soft and easily incorporated.
- 2) Measure out equal components of the product by weight and mix thoroughly together to ensure a uniform mixture. Avoid overmixing which

- could cause air entrapment.
- 3) Units to be potted can be poured under vacuum if necessary.

IMPORTANT: Contents of Part B component are sensitive to moisture. Keep containers tightly sealed when not in use. When sealing partially used containers, a small amount of nitrogen applied to the surface of the polymer will protect against moisture and humidity effects.

CURE SCHEDULE: Initial cure is achieved in 1 to 2 hours at room temperature. Final cure takes at least 5 to 7 days at 72°F. To accelerate the cure, higher temperatures can be used; 8 to 12 minutes at 190°F is usually sufficient.

STORAGE REQUIREMENTS: This product has a tendency to settle upon storage and shipment; material should be mixed well prior to use. Store in a cool dry place; keep from freezing. Keep away from direct heat or flame.

TEST PROCEDURES:

Procedure for Gel Time (2977) ASTM-D-2471-68:

- 1) Conduct @ 75°F.
- 2) Weigh 100 grams of Component A into a paper cup.
- 3) Weigh 100 grams of Component B into a paper cup.
- 4) Pour the contents of the cup containing the A Component into the cup containing the B Component.
- 5) Start the timer.
- 6) Mix briskly with a tongue depressor for one (1) minute.
- 7) The Gel Time shall be the elapsed time from the start of mixing until the reacting mass no longer flows off the tongue depressor back into the paper cup.

Procedure for Slump Test:

- 1) Have both components to be tested at ambient temperature (75°F).
- 2) Weigh 100 grams of Component A in a paper cup.
- 3) Weigh 100 grams of Component B in a paper cup.
- 4) Pour the contents of the cup containing the A Component into the cup containing the B Component.
- 5) Start the time while hand mixing thoroughly for one (1) minute.
- 6) Pour the mixture into a three (3) ounce ointment tin (approximately 2-1/8 inches in diameter by 1-3/8 inches deep). Fill to within 3/8 inch of top.
- 7) The time is measured from the start of mixing.
- 8) After 15 minutes, place container on its side.
- 9) The reacting material shall not have slumped beyond the edge of the container when observed 30 minutes after the start of mixing.

IMPORTANT:

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HEALTH CAUTION:

Avoid breathing possible fumes, mists and vapors, which can cause severe respiratory damage. Use of NIOSH approved breathing apparatus is required for more than minimal exposure. Always work in areas with adequate ventilation to allow dissipation of polyamine and other chemical fumes, and where applicable, solvent fumes. Use of goggles, protective garments, rubber gloves, protective cream is required. If material gets into eyes, flush thoroughly with clear water for twenty (20) minutes; then seek medical treatment. Avoid skin contact. Material can cause contact dermatitis. Always wash exposed areas immediately, using warm water and soap, followed by rinsing with clean water. Observe all safety precautions. It is important when using solvent based materials or solvents to keep away from open flame or ignition source.

PLEASE REFER TO MATERIAL SAFETY DATA SHEET FOR FURTHER FIRST AID INFORMATION.

FOR CHEMICAL EMERGENCY
CALL CHEMTREC (DAY OR NIGHT) 800-424-9300.