



# SerpiFlex

## Asbestos Encapsulation Products

### *Benefits*

- *A concentrate that can be used for all types of asbestos abatement, including removal*
- *One product does all six types of abatement*
- *Because it is concentrated it saves valuable warehouse space*
- *Saves transportation cost*
- *Saves labor*
- *Saves up to 80% of the cost of removal of asbestos*
- *Has been tested and found to be effective for at least 20 years*
- *Maintains the fire protective properties of the asbestos substrate and has only negligible effects on its acoustic properties*
- *Has been exhaustively tested in accordance with the U.S. Environmental Protection Agency (EPA) requirement by Battelle Institute, U.S. Testing Company and UL*

### *Recommended Uses*

- *Spray-Applied Fire Resistive Material or Acoustical Insulation*
- *Pipe covering, boilers, ducts and breeching repairs*
- *Fiber-free removal*
- *Lock-down (post removal)*
- *Crawl spaces and other contaminated soil areas*

### *Product Description*

SerpiFlex Asbestos Encapsulant is a concentrated water-based vinyl acrylic product with various flame-retardant chemicals and fillers. It is nontoxic, non-combustible and does not contain any solvents or silicates. Available in clear, white and colors.

### *Availability*

SerpiFlex is available through authorized Fiberlock distributors.

### *Warranty*

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable. However, since the conditions of use and application are beyond our control, Fiberlock Technologies shall not be liable for any damage, direct or consequential, resulting from the use of this material or design. Fiberlock Technologies only warranty shall be to replace any of its products found to be defective.

### *Technical Support*

Fiberlock provides technical support for all of its products, including SerpiFlex. Call toll free at 800-342-3755 for assistance in product selections. We provide engineering analysis for unique lead abatement applications. Safety Data Sheets are also available.

# Concentrated Asbestos Encapsulant Formulas for all types of Abatement

## FORMULA #1 – Penetrating Formula Mix\*

For friable, porous, sprayed on fireproofing or acoustical insulation

- 45% SerpiFlex to 55% water (potable) [5 gal (19 L) SerpiFlex : 6 gal (22.8 L) water]

### Application

- Use airless spray equipment Binks, Graco, Wagner or equal
- When applying with a sprayer, wear a NIOSH approved respirator with any R, P,N or HE filter
- 3/8-1/2 in. (9.5-12.7 mm) hose with .022 in. (559 micron) tip, 12 in. (30 cm) fan
- Apply multiple coats in one application
- Keep spray gun moving, apply until surface glistens or material appears on surface
- Rate of 30 ft<sup>2</sup>/gal (0.74 m<sup>2</sup>/L) per 3/4 in. (19 mm) of penetration (average)
- First coat uses 60-70% of formula, let set 4 hours
- Apply second coat with balance or apply second coat with Formula #2 for finish coat

## FORMULA #2 – Bridging Formula Mix\*

For cementitious sprayed on fireproofing or acoustical insulation

- 5 gal (19 L) SerpiFlex to 1 gal (3.8 L) water

### Application

- Use airless spray equipment (as in Formula #1) with .017 in. (432 micron) tip to avoid splash-back
- When applying with a sprayer, wear a NIOSH approved respirator with any R, P,N or HE filter.
- Rate of 50-100 ft<sup>2</sup>/gal (1.2-2.4 m<sup>2</sup>/L)
- Use brush for touch up if needed after drying
- Use 60-70% for first coat
- Use 30-40% for second coat
- Application rate varies according to density
- If matrix indents easily with finger pressure, use Formula #1 for first coat

## FORMULA #3 – Full Strength Mix\*

For pipe covering, boilers, ducts and breaching repairs

- Brush, Roller or Spray

### Application

- Spray, brush or roller over entire surface, using 2 or 3 coats as needed\*
- When applying with a sprayer, wear a NIOSH approved respirator with any R, P,N or HE filter
- Use fiberglass or cloth scrim fabric on damaged areas sprayed or brushed on with SerpiFlex
- Mix a suitable insulating material with SerpiFlex or water to fill depressions and voids
- For "Palm Grade," use SerpiMastic TrowelableRate varies 100-200 ft<sup>2</sup>/gal (2.4-4.8 m<sup>2</sup>/L) per coat – multiple thin coats work best

## FORMULA #4 – Removal Formula Mix\*

For fiber-free removal

- 1 gal (3.8 L) SerpiFlex to 5 gal (19 L) water

### Application

- Removal: apply as needed for removal approximately 50 ft<sup>2</sup>/gal/in. (0.5 m<sup>2</sup>/L/cm) penetration
- Use .022 in. (559 micron) tip or larger
- Spray multiple coats in one application – allow for SerpiFlex to absorb to substrate before removing
- When applying with a sprayer, wear a NIOSH approved respirator with any R, P,N or HE filter

## FORMULA #5 – Lock-Down Formula Mix\*

For post-removal

- 45% SerpiFlex to 55% water (potable) [5 gal (19 L) SerpiFlex : 6 gal (22.8 L) water]

### Application

- Use airless spray equipment Binks, Graco, Wagner or equal
- When applying with a sprayer, wear a NIOSH approved respirator with any R, P,N or HE filter
- 3/8-1/2 in. (9.5-12.7 mm) hose with .017 in. (432 micron) tip, 12 in. (30 cm) fan
- Post Removal Assurance Rate – 400-500 ft<sup>2</sup>/gal (9.6-12 m<sup>2</sup>/L) after mixing
- One coat as needed
- Also used on plastic barriers before final tear-down

## FORMULA #6 – Ground Sealer Formula Mix\*

For crawl spaces and other contaminated soil areas

- 45% SerpiFlex to 55% water (potable) [5 gal (19 L) SerpiFlex : 6 gal (22.8 L) water]

### Application

- Use airless spray equipment Binks, Graco, Wagner or equal
- When applying with a sprayer, wear a NIOSH approved respirator with any R, P,N or HE filter
- 3/8-1/2 in. (9.5-12.7 mm) hose with .022 in. (559 micron) tip, 12 in. (30 cm) fan
- Apply multiple coats in one application
- Keep spray gun moving, apply until surface glistens or material appears on surface or as needed
- Rate of 30 ft<sup>2</sup>/gal/in. (0.03 m<sup>2</sup>/L/cm) of penetration is average
- Will not penetrate wet or clay earth
- Rate of penetration will vary according to different soil conditions

\*In all cases a representative sample area should be treated [3-4 ft (0.9-1.2 m) section] to determine rate of application, penetration and desired effect of finish.

## Product Specifications and Performance Data

Description	A ready-mixed coating material of vinyl-acrylics and water-based resins, various flame retardant chemicals and fillers
Color	White
Finish	Matte
Surface Dust	None
Density	1.20
Viscosity	80-85 krebs units or stormer viscometer
Percent of Solids	Full strength – 40% Penetration mix – 21%
Adhesion/Cohesion	Passes Battelle test
Penetration	Battelle test result: .66 to 1 in. per 38 ft <sup>2</sup> /gal (1.6-2.5 cm per 0.912 m <sup>2</sup> /L), cured shield (deeper penetration at lower coverage rate)
Water/Moisture Resistance	Excellent
Odor	Odorless when dry, negligible when wet
Gardner Impact Test	Exceeds EPA req., 400% increased
Flame Spread (ASTM E84)	0
Smoke Development (ASTM E84)	5
Encapsulation Certification	ASTM P189 Specification for Encapsulant for Friable Asbestos-containing Building Materials
Toxic Gas Release	Battelle: “well below danger level” Tested in accordance with the National Academy of Sciences
Shelf Life	3 years in closed original containers at room temperature
Storage	40°F to 90°F (5°C to 30°C), protect from freezing
Vapor Permeability	ASTM E96 0.50
Life Expectancy	20 years+ per U.S. Testing Co. accelerated aging test

### Product Availability

SerpiFlex is available through authorized Fiberlock distributors in the following quantities:

Description	Part No.	Size
SerpiFlex	2451-5	5 Gallons
SerpiFlex	2451-55	55 Gallons

**For Technical Assistance call toll free at 800.342.3755**

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of this product are beyond our control. Neither Fiberlock Technologies, Inc., nor its agents shall be responsible for the use or results of use of this product or any injury, loss or damage, direct or consequential. We recommend that the prospective user determine the suitability of this product for each specific project and for the health and safety of personnel working in the area.

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