

## Serpiflex® Shield

### 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

#### Product Description

Serpiflex® Shield 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.

#### 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

#### Availability

Serpiflex Shield is available through authorized RectorSeal 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, RectorSeal shall not be liable for any damage, direct or consequential, resulting from the use of this material or design. RectorSeal only warranty shall be to replace any of its products found to be defective.

#### Technical Support

RectorSeal provides technical support for all of its products, including Serpiflex Shield. Call toll free at 800-231-3345 for assistance in product selections. We provide engineering analysis for unique asbestos abatement applications. Material Safety Data Sheets are also available. More information is available at our web site, <http://flamesafe.rectorseal.com>.

## 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
- $\frac{3}{8}$ - $\frac{1}{2}$  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  $\frac{3}{4}$  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
- 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 breeching repairs

- Brush, Roller or Spray

#### Application

- Spray, brush or roller over entire surface, using 2 or 3 coats as needed\*
- 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® Trowelable
- Rate 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

### 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
- $\frac{3}{8}$ - $\frac{1}{2}$  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
- $\frac{3}{8}$ - $\frac{1}{2}$  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.

## Technical Data

Description	A ready-mixed coating material of vinyl-acrylics and water-based resins, various flame retardant chemicals and fillers
Color	Matte-white
Finish	Semi-gloss
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	One year in closed original containers at room temperature
Storage	40°F to 90°F (5°C to 30°C), protect from freezing
Temperature Range	Up to 1800°F (982°C) on exposed pipes
Vapor Permeability	ASTM E96 0.50
Life Expectancy	20 years+ per U.S. Testing Co. accelerated aging test

### Product Availability

Serpiflex Shield is available through authorized RectorSeal Product distributors in the following quantities:

Description	Part No.	Volume
Poly Pail 5 gal (19.0 L)	50161	1,155 in. <sup>3</sup> (18,927 cm <sup>3</sup> )
Poly Drum 55 gal (208 L)	50162	12,705 in. <sup>3</sup> (208,198 cm <sup>3</sup> )



*For Technical Assistance call toll free at 800-231-3345.*

**web** Visit our web site at <http://flamesafe.rectorseal.com>

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*We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate and is offered for the users' consideration, investigation and verification, but we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would infringe any patent or copyright.*  
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