

## SermaShield™ 500 Powder Coating

### Description

SermaShield 500 is a seamless fluoropolymer coating system designed to protect processing equipment from chemical attack and thermal shock resistance in continuous operating temperatures up to 400°F (205°C). The coating can be used with full vacuum rating over the entire pH range. SermaShield 500 also exhibits exceptional nonstick and impact resistant properties.

### Advantages:

- Operating temperature range from -110°F to 400°F (-79° to 205°C)
- Full vacuum rating over the entire pH range
- Pinhole free
- Compatible with all substrates except some alloys with high copper content
- Field repairable
- Excellent corrosion resistance
- Complex geometries are easily coated
- Available in thicknesses from 15-30 mils (0.375 - .75mm)
- Compliant per FDA regulations 21 CFR
- Non wetting, nonstick surface



*Semi conductor support bracket*



*Semi conductor wafer holder*

### Applications

- Agitators
- Baffles
- Bellows
- Centrifuges
- Columns
- Dip Tubes
- Filter Housings
- Impellers
- Pumps & Housings
- Reactors
- Semiconductor equip
- Storage Vessels
- Tanks
- Thermowells
- Valves

Visit us online: [www.sermatech.com](http://www.sermatech.com)

#### Sermatech Texas

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#### Sales

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PROPERTY	METHOD	SERMASHIELD
Tensile Strength (MPa) at 23°C (73°F), Psi	ASTM D638	23
Elongation, % at 23°C (73°F)	ASTM D638	325
Flexural Modulus (MPa)	ASTM D790	586
Specific Gravity	ASTM D792	2.15
Melting Point, °C (°F)	ASTM D3418	260 (500)
Maximum Use temp., °C (°F) varies with chemical exposure		204 (400)
Hardness, Shore D	ASTM D636	D55
Folding Endurance	ASTM D2176	5-80 x 10 <sup>-3</sup>

Note:  
The suitability of SermaShield 500 for use is dependent upon process environment.

Please contact us to evaluate your process environment.

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