

# SermaShield™ GSC-C Advanced PFA Coating



## Description

SermaShield GSC-C is made from fully-fluorinated, 100% PFA resins that contain no fillers or additives. The coating is spray applied to the substrate in successive layers and cured after each coat. A spray-applied proprietary fusion layer between the substrate and the coating gives SermaShield GSC-C a bond strength well in excess of that required to resist full vacuum.

## Advantages

- Full vacuum rating over the entire pH range
- Pinhole free
- Applied as aqueous dispersion at room temperature
- Easily coats complex geometries
- Available in thickness from 40-60 mils
- Coating system operating temperature range: -310°F to 212°F (-190°C to 100°C)

## Applications

The universal chemical resistance of SermaShield GSC-C, combined with its ease of application to most complex geometries, make it ideally suited for a wide variety of applications including:

- Baffles
- Centrifuges
- Columns
- Covers
- Filters
- Glove Boxes
- Receivers
- Storage Tanks
- Vessels

## Field Repair Capability

SermaShield GSC-C can be repaired on site should mechanical damage occur during use. The coating's ability to "melt flow" at elevated temperatures allows for quick and reliable repairs that can reduce expensive downtime costs.

## Technical Data

Operating Temperature Range: -310°F to 212°F (-190°C to 100°C)
Chemical Resistance: Equal to PTFE
pH Range: 0-14
Available Thickness: 40-60 mils
Final Continuity Test: 10 KV-DC
Suitable for Vacuum Service
Compatible with all substrates except alloys with high copper content
Field Repairable

## In-Service Inspection

Fluoropolymer coatings should be checked for delamination, disbondment, stress cracking or discoloration on a periodic basis. Any identified defects should be reported to a Sermatech representative immediately.

Fluoropolymer coatings applied to processing equipment that urgently needs to be returned to service should be submitted to a 2500 Volt DC spark test carried out in accordance with the Sermatech Spark Testing Specification. A test that is not performed to this specification can create additional pinholes and significantly degrade the coating.

## Nozzle & Column Length Guidelines

Nozzle/Column Diameter	Blue Armor® Halar®, ETFE	SermaShield GSC-C SermaShield GSC-CS	SermaShield GSC-M SermaShield GSC-MS
1/4" to 1"	Pad Flange	N/A	N/A
1" to 2"	Pad Flange	Pad Flange	N/A
2" to 2 1/4"	12"	6"	Pad Flange
3" to 3 1/4"	12"	6"	Pad Flange
4"	18"	36"	18"
5"	36"	36"	18"
6"	96"	60"	30"
8"	96"	60"	30"
10"	120"	60"	36"
12"	120"	60"	36"
14"	120"	72"	48"
16"	144"	72"	48"
18"	144"	120"	48"
20"	168"	120"	96"
24"	**	**	120"***

\*\*Check with the facility for maximum lengths.

**!** The suitability of SermaShield GSC-C for use is dependent upon process environment. Please contact your Sermatech representative to ensure that the coating is compatible with your process conditions.

SermaShield contains Fluoroshield plus other proprietary materials by Sermatech

For more information or to place an order, call Sermatech Texas 713-849-9474.

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