

SIMONA® PVDF 740 Sheet
SIMONA® PVDF-C 2850 Sheet
SIMONA® PVDF 2800 Sheet

Exceptional resistance to acids and ultra-pure water. FM 4910 and UL 94 V-0 flammability test compliance for semiconductor cleanroom and electrical equipment.



SIMONA AMERICA Industries offers three grades of PVDF (polyvinylidene fluoride) sheet for diverse chemical process and semicon wet bench equipment.

SIMONA® PVDF 740 offers higher stiffness and temperature resistance.

SIMONA® PVDF-C 2850 copolymer sheet has more impact resistance and flexibility.

SIMONA® PVDF-HD 2800 flex sheet offers increased ductility and elongation for exceptional resistance to stress cracking.

All grades perform well in many chemical environments and are exceptionally resistant to concentrated acids and ultra-pure water (UPW) even at elevated temperatures.

For weld integrity and compatibility, SIMONA AMERICA Industries manufactures weld rod made from the same resins used in the production of each PVDF grade. All three PVDF grades can also be welded to SIMONA® CRP-1 (SIMONA AMERICA Industries leading FM 4910 white PVC sheet material) using our proprietary weld rod, VERSAROD®.

In critical applications that require the management of aggressive chemicals, safety and reliability are to priorities. That's why experts at SIMONA® recommend corrosion resistant, high performance PVDF materials extruded from Arkema Kynar® PVDF resins.

Advantages

- PVDF Kynar® 740
- FM 4910 Listed
 - UL 94 V-0, 5V
 - USP Class VI
 - NSF-51, NSF-61
 - Operating temp: 14 °F – 280 °F

- PVDF Kynar® 2850
- Resin meets FM 4910 criteria
 - UL 94 V-0
 - USP Class VI
 - Operating temp: -4 °F – 265 °F

- PVDF Kynar® 2800
- UL 94 V-0
 - USP Class VI
 - NSF-51, NSF-61
 - Operating temp: -20 °F – 255 °F

- All PVDF Grades
- Exceptional UPW and acid resistance
 - High gloss sheet surface
 - Welds to SIMONA® CRP-1 with VERSAROD® weld rod

Applications

- Semicon process tanks, components
- Chemical process tanks, components
- Wetted parts
- Fume hoods, ducting
- DI water and acid etch systems
- Scientific and laboratory equipment
- Mechanical components
- Fabricated vessels
- Pumps, valves, filters

Configurations

- Sheet sizes
 - 48 x 96 in.
 - 48 x 48 in.
 - 24 x 48 in.
- Gauges
 - PVDF 740: 0.125 to 2.0 in.
 - PVDF-C 2850: 0.062 to 0.500 in.
 - PVDF-HD 2800: 0.062 to 0.500 in.
 Gauges vary by sheet size
- Custom sizes: Available upon request
- Color
 - Natural (off-white)
- Weld rod
 - 0.125
 - 0.156
 - 0.197



PROPERTIES: SIMONA® PVDF SHEET AND ROD

PROPERTY, unit of measure ¹	Test Method	TYPICAL VALUES		
		SIMONA® PVDF 740	SIMONA® PVDF-C 2850	SIMONA® PVDF 2800
Specific Gravity	ASTM D792	1.78	1.78	1.68
Water Absorption, %	ASTM D570	<0.03	<0.05	<0.05

MECHANICAL

Tensile Strength @ yield	ASTM D638	6,000 psi (41.4 MPa)	5,000 psi (34.5 MPa)	3,630 psi (25.0 MPa)
Elongation @ break, %	ASTM D638	65	110	200
Flexural Modulus	ASTM D790	195,000 psi (1,345.5 MPa)	170,000 psi (1,173 MPa)	110,000 psi (759 MPa)
Notched Izod Impact	ASTM D256	1.0 ft-lb/in. (53.4 J/m)	3.0 ft-lb/in. (160.2 J/m)	6.0 ft-lb / in. (320.4 J/m)
Hardness, Shore D	ASTM D2240	78	72	67

THERMAL

Continuous Service Temperature	Maximum	261 °F (127.3 °C)	253 °F (122.9 °C)	255 °F (123.8 °C)
Melting Point	ASTM D3418	338 °F (170 °C)	316 °F (157.9 °C)	288 °F (142.3 °C)
Coeff. of Expansion x10 ⁻⁵	ASTM D696	7.2 in./in., °F (13 mm/mm, °C)	8.5 in./in., °F (15.3 mm/mm, °C)	8.5 in./in., °F (15.3 mm/mm, °C)
@ 66 psi (0.45 MPa)	ASTM D648	284 °F (140 °C)	255 °F (124 °C)	154 °F (67.8 °C)
@ 264 psi (1.8 MPa)	ASTM D648	244 °F (117.9 °C)	120 °F (48.9 °C)	118 °F (47.8 °C)

FLAMMABILITY

	UL 94	V-0	V-0	V-0
	FM 4910	Yes	—	—

¹All tests at 73° F (22.8°C) in dry conditions unless otherwise noted.

**SIMONA® CHEMICAL RESISTANT
FM 4910 AND UL 94 V-O COMPLIANT
SHEET PRODUCTS**

Fluoropolymers

- SIMONA® PVDF 740 homopolymer
- SIMONA® PVDF-C 2850 copolymer¹
- SIMONA® E-CTFE 901
- SIMONA® E-CTFE 902²
- SIMONA® PFA-M 1520³

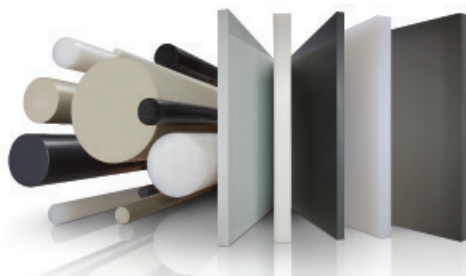
Type I PVC, CPVC and Polypropylene

- SIMONA® PVC Type I CRP-1 (high impact strength)
- SIMONA® PVC Type I VS-1
- SIMONA® Polypropylene FRP-3
- SIMONA® Polypropylene FR-PP¹
- SIMONA® CPVC 2000 - clear blue

¹UL 94 V-0 only. Not FM 4910 listed.

²FM 4910 approved-limited use.

³Accepted by FM as fully fluorinated material meeting FM 4910: no listing required



SIMONA AMERICA Industries offers the widest product range of PVC sheet and rod – FM 4910 rated sheet – chemical resistant materials from PVC, PP and PE to fluoropolymers – orthotics and prosthetics sheet – Boltaron® aircraft sheet – plus proven products for boat building, outdoor furniture and many other industries.

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SIMONA AMERICA Industries

101 Power Blvd.
Archbald, PA 18403
Phone 1 866 501 2992
Fax 1 800 522 4857
sales@simona-america.com
www.simona-america.com