

Industrial Sheet/Lining

The superior corrosion resistance and high temperature performance of Corzan CPVC is available in 48" x 96" sheet. The excellent fire performance of Corzan CPVC will also be useful in many sheet applications. Sheet products are available in thicknesses ranging from 1/8" to 3," and are either extruded or compression molded.

The ability to bend, shape, and weld sheet made from Corzan CPVC enables its use in a wide variety of process applications including tanks, scrubbers, and ventilation systems.

Recommendations for fabricating equipment using sheet are covered in the Fabrication section of the design manual. Sheet made from Corzan CPVC can readily be overwrapped with Fiber Reinforced Polyester (FRP), if necessary, and will not require fabric-backing to achieve proper adhesion between the CPVC and FRP.

Refer to the Product Availability section of the design manual for information on where to obtain sheet made from Corzan CPVC.

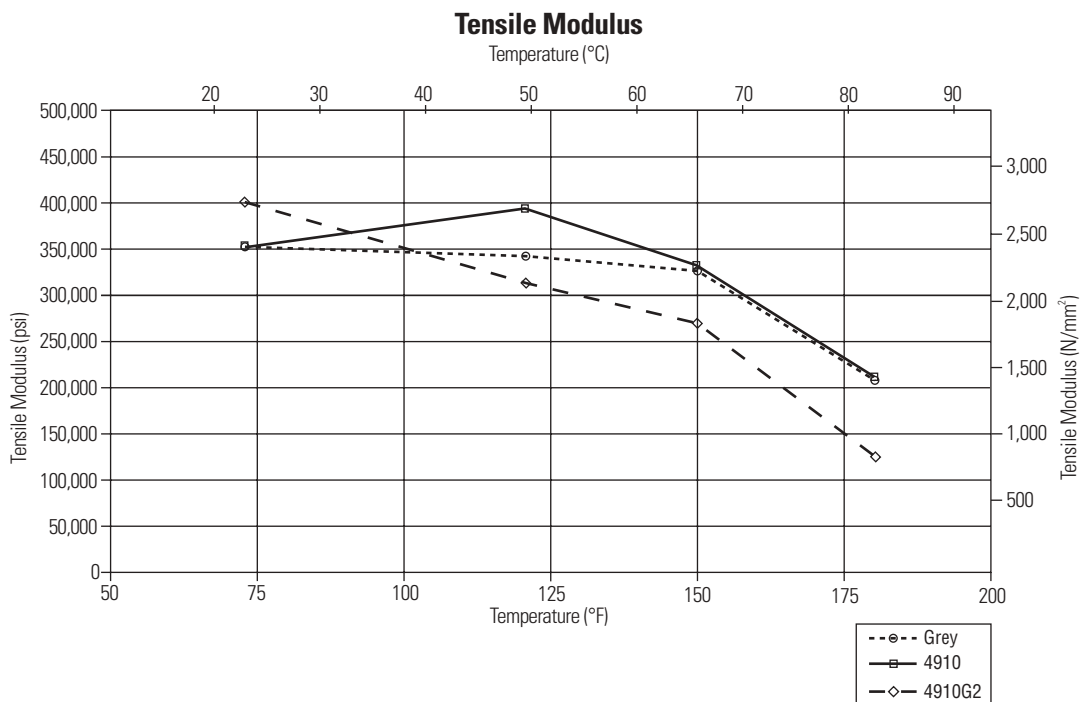
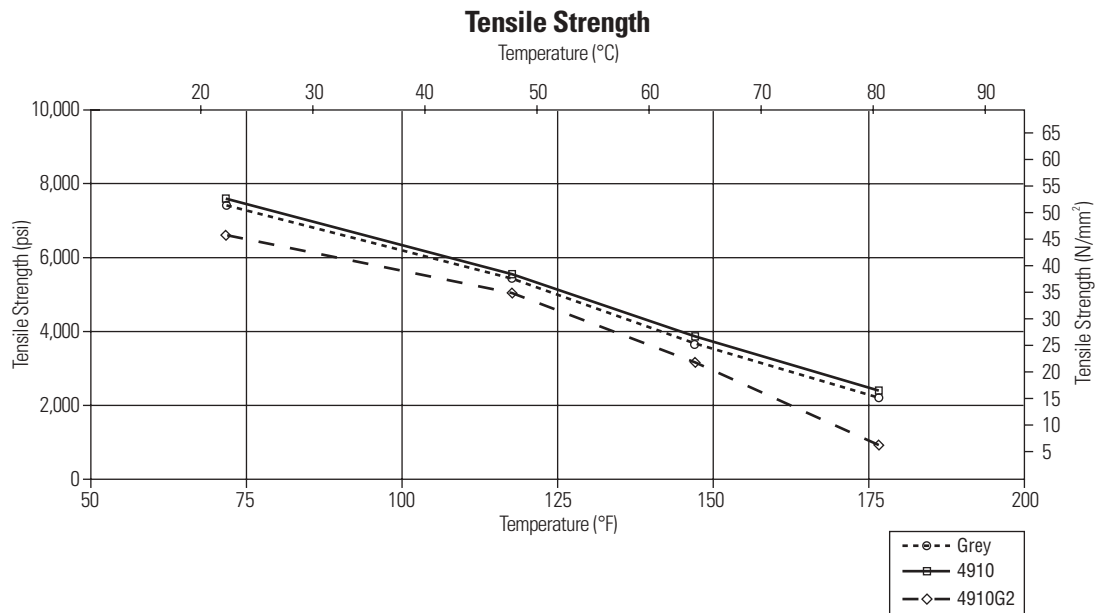
Basic Physical Properties

Property	Test	Condition	English Units	SI Units
GENERAL				
Density (Grey, Specific Gravity = 1.47)	ASTM D792	73°F/23°C	91.7 lb/ft ³	1.47 g/cm ³
Density (4910 & 4910G2, SG = 1.55)	ASTM D792	73°F/23°C	96.7 lb/ft ³	1.55 g/cm ³
Specific Volume (Grey)		73°F/23°C	0.0109 ft ³ /lb	0.680 cm ³ /g
Specific Volume (4910 & 4910G2)		73°F/23°C	0.0103 ft ³ /lb	0.645 cm ³ /g
Water Absorption	ASTM D570	73°F/23°C	+0.03%	+0.03%
		212°F/100°C	+0.55%	+0.55%
Rockwell Hardness	ASTM D785	73°F/23°C	115	
Cell Class (Grey)	ASTM D1784		24436	
MECHANICAL				
*Notched Izod Impact (Grey)	ASTM D256	73°F/23°C	9.0 ft lb _i /in	480 J/m
*Notched Izod Impact (4910)	ASTM D256	73°F/23°C	2.2 ft lb _i /in	115 J/m
*Notched Izod Impact (4910G2)	ASTM D256	73°F/23°C	3.3 ft lb _i /in	185 J/m
*Tensile Strength (Grey)	ASTM D638	73°F/23°C	7300 psi	50 N/mm ²
*Tensile Strength (4910)	ASTM D638	73°F/23°C	7500 psi	52 N/mm ²
*Tensile Strength (4910G2)	ASTM D638	73°F/23°C	6540 psi	48 N/mm ²
*Tensile Modulus (Grey)	ASTM D638	73°F/23°C	350,000 psi	2400 N/mm ²
*Tensile Modulus (4910)	ASTM D638	73°F/23°C	350,000 psi	2400 N/mm ²
*Tensile Modulus (4910G2)	ASTM D638	73°F/23°C	400,000 psi	3100 N/mm ²
*Flexural Strength (Grey)	ASTM D790	73°F/23°C	14,300 psi	100 N/mm ²
*Flexural Strength (4910)	ASTM D790	73°F/23°C	13,500 psi	93 N/mm ²
*Flexural Strength (4910G2)	ASTM D790	73°F/23°C	11,000 psi	80 N/mm ²
*Flexural Modulus (Grey)	ASTM D790	73°F/23°C	361,000 psi	2490 N/mm ²
*Flexural Modulus (4910)	ASTM D790	73°F/23°C	408,000 psi	2810 N/mm ²
*Flexural Modulus (4910G2)	ASTM D790	73°F/23°C	370,000 psi	2690 N/mm ²
Compressive Strength (Grey)	ASTM D695	73°F/23°C	9700 psi	67 N/mm ²
Compressive Strength (4910)	ASTM D695	73°F/23°C	10,200 psi	70 N/mm ²
Compressive Strength (4910G2)	ASTM D695	73°F/23°C	9860 psi	68 N/mm ²
Compressive Modulus (Grey)	ASTM D695	73°F/23°C	198,000 psi	1365 N/mm ²
Compressive Modulus (4910)	ASTM D695	73°F/23°C	199,000 psi	1370 N/mm ²
Compressive Modulus (4910G2)	ASTM D695	73°F/23°C	188,000 psi	1295 N/mm ²
THERMAL				
Coefficient of Thermal Expansion	ASTM D696		3.8 x 10 ⁻⁵ in/in/°F	2.1 x 10 ⁻⁵ m/m/K
Thermal Conductivity	ASTM C177		0.95 BTU in/hr/ft ² /°F	0.137 W/m/K
Heat Distortion Temperature (Grey)	ASTM D648		198°F	92°C
Heat Distortion Temperature (4910)	ASTM D649		205°F	96°C
Heat Distortion Temperature (4910G2)	ASTM D650		169°F	79°C
*Specific Heat (Heat Capacity/mass)	DSC	73°F/23°C	0.21 BTU/lb _m °F	0.88 J/gK
		212°F/100°C	0.26 BTU/lb _m °F	1.09 J/gK
FLAMMABILITY				
Flammability Rating	UL 94		V-0	
Flame Spread (Grey)	ASTM E84	0.145"/1"/2"	20/20/20	
Smoke Developed (Grey)	ASTM E84	0.145"/1"/2"	760/550/530	
Limiting Oxygen Index	ASTM D2863		60%	
ELECTRICAL				
Dielectric Strength	ASTM D149		1250 V/mil	492,000 V/cm
Dielectric Constant	ASTM D150	60 Hz, 30°F/-1°C	3.70	3.70
Power Factor	ASTM D150	1000 Hz	0.007%	0.007%
Volume Resistivity	ASTM D257	73°F/23°C		3.4x10 ¹⁵ ohm-cm

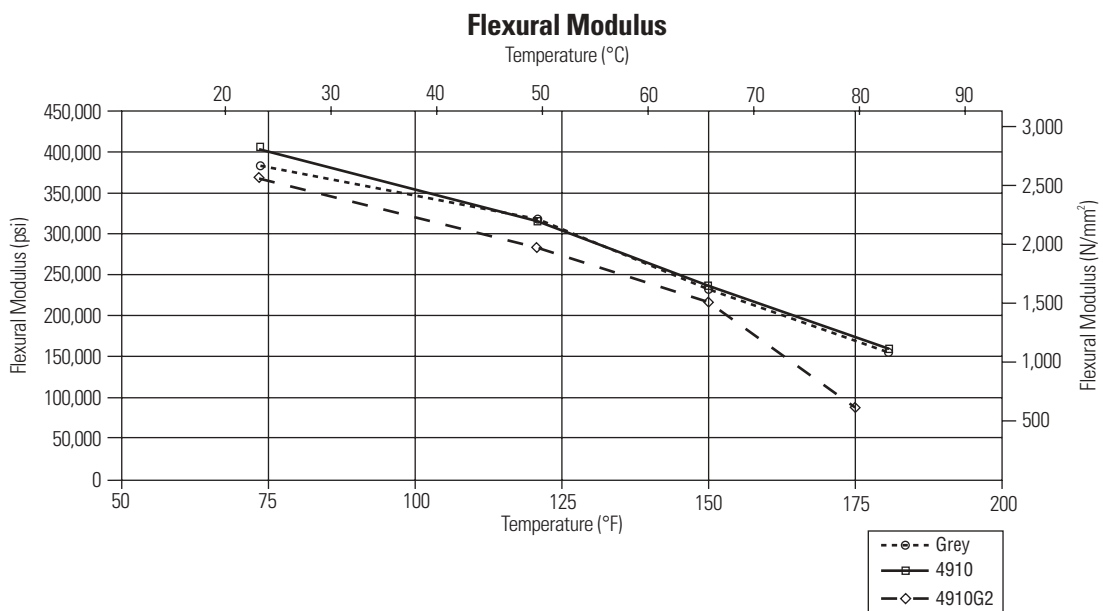
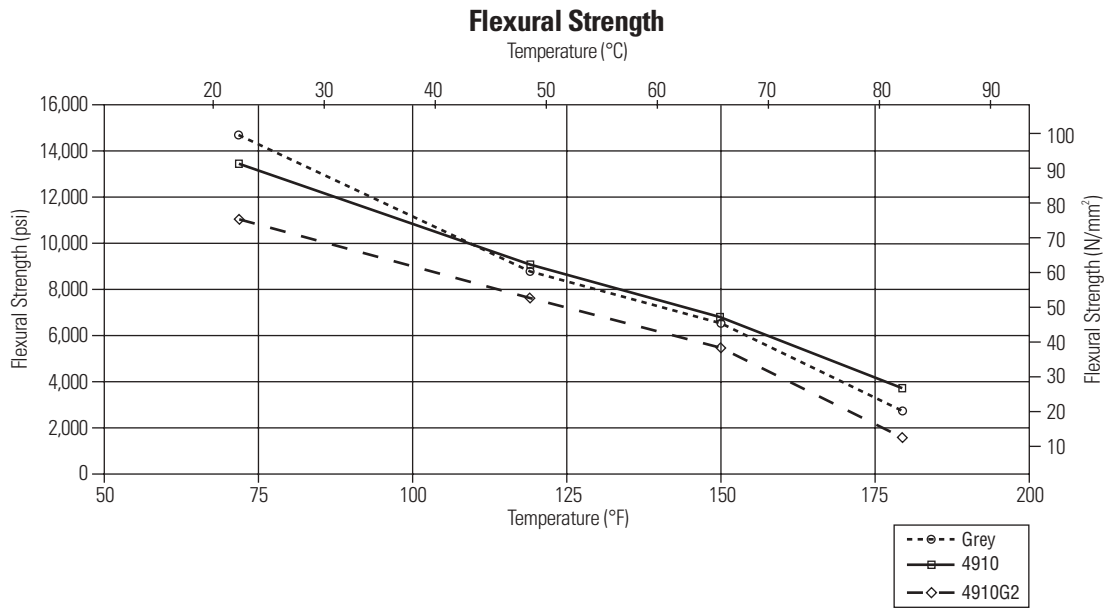
*Plots of these properties versus temperature follow this table.

Data presented are typical values.

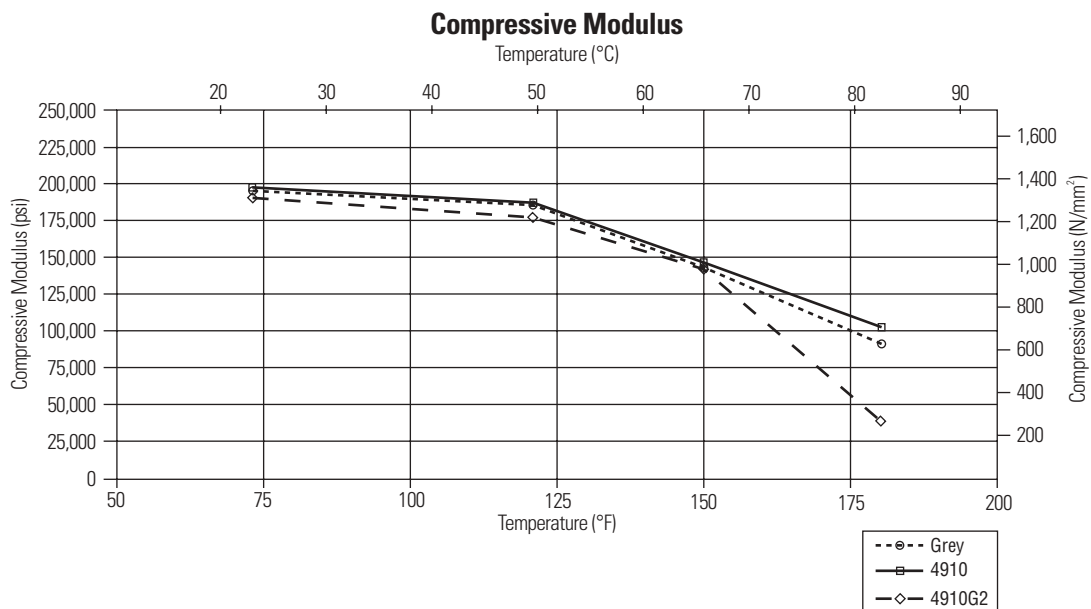
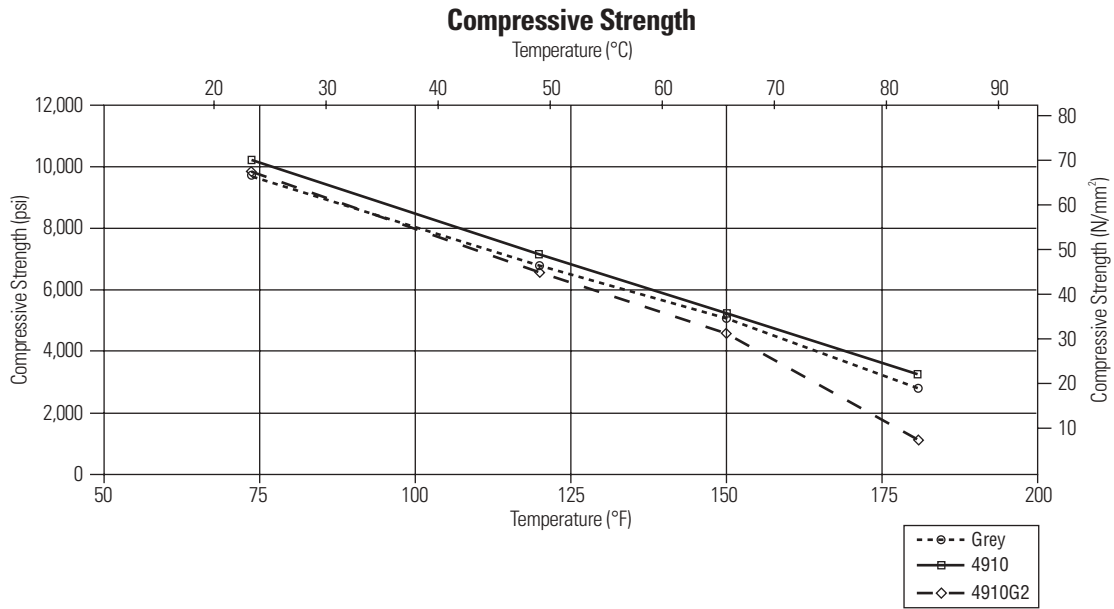
Basic Physical Properties (cont.)



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