

>> EXCEPTIONAL CHEMICAL RESISTANCE AND FIRE SAFETY

# SYMALIT<sup>®</sup> ECTFE

## Key Benefits

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- High purity
- Color Consistency
- Excellent chemical resistance to solvents, strong acids and bases
- High-Quality Masked Surface
- Flame resistant
- Excellent impact strength
- USP Class VI, UL94 V-0
- Resin certified to FM 4910  
*Shapes certification to FM 4910 pending*
- Tolerances in accordance to ASTM D6713-01

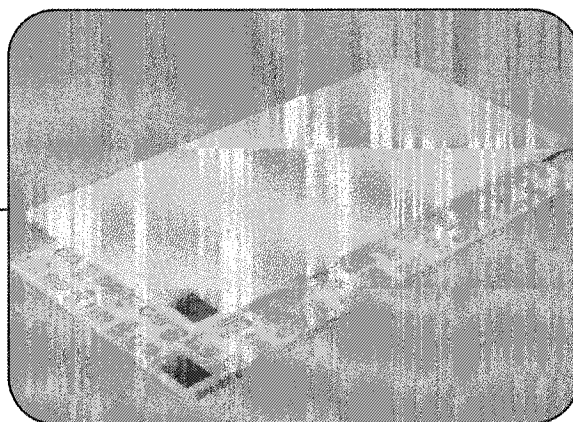
### Applications

- Fluid handling
- Semiconductor equipment
- Fire safe componentry

Symalit<sup>®</sup> ECTFE offers a broad range of physical, mechanical, and flame resistant properties. It provides an excellent combination of properties designed to meet the standards of FM 4910 which governs the materials of construction for cleanroom equipment. The result is that this fluoroplastic continues to be a long-term choice for safety and protection in fire-safe systems.

### Symalit ECTFE (ethylene chlorotrifluoroethylene)

Manufactured from Halar<sup>®</sup> resin, this material offers excellent corrosion and chemical resistance, particularly at elevated temperatures and in strong basic chemistries.



# Data Sheet - Symalit® ECTFE

**English/  
Common  
Units**

	<b>Property</b>	<b>Method</b>	<b>Conditions</b>	<b>English/ Common Units</b>	<b>Values</b>
<b>Physical Properties</b>	Specific Gravity	D792	-	-	1.68
	Melting Temperature	D3418	-	°F	464
	Water Absorption	D570	at 77°C, 24 hours	%	<0.01
<b>Thermal Properties</b>	Coefficient of Linear Thermal Expansion	D696	-	°F <sup>-1</sup>	6.6 x 10 <sup>-5</sup>
	Deflection Temperature	D648	at 264 psi	°F	170
<b>Flammability</b>	Limiting Oxygen Index	D2863	-	%	60
	Burning Rate	UL	Bulletin 94	-	V-0
<b>Mechanical Properties</b>	Tensile Yield Strength	D638	-	psi	4,500
	Break Elongation	D638	-	%	200
	Tensile Modulus	D638	-	psi	240,000
	Flexural Strength	D790	-	psi	7,000
	Flexural Modulus	D790	-	psi	240,000
	Compressive Strength	D695	-	psi	5,000
	Izod Impact Strength	D256	notched	ft-lb/in	no break
	Izod Impact Strength	D256	unnotched	ft-lb/in	>50
	Hardness	D2240	-	Shore D	75
	<b>Electrical Properties (at 77°F)</b>	Volume Resistivity	D257	DC	ohm-cm
Dielectric Constant		D150	100 Hz	-	3.5
			1 kHz	-	3.0
			100 kHz	-	2.5
Dissipation Factor		D150	100 Hz	-	.005
			1 kHz	-	.004
			100 kHz	-	.003
Dielectric Strength	D149	-	volts/mil	500	

