

# Halar<sup>®</sup> 930LC

## ethylene chlorotrifluoroethylene copolymer

Material Status	<ul> <li>Commercial: Active</li> </ul>			
Availability	<ul> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> <li>Europe</li> </ul>	<ul><li> Latin America</li><li> North America</li></ul>		
Features	<ul> <li>Medium Viscosity</li> </ul>			
Forms	Pellets			
Processing Method	Extrusion			
Physical		Typical Value	Unit	Test method
Density / Specific Gravity		1.68		ASTM D792
Melt Mass-Flow Rate (MFR) (27	5°C/2.16 kg)	4.5	g/10 min	ASTM D1238
Molding Shrinkage - Flow		2.5	%	ASTM D955
Water Absorption (Equilibrium)		< 0.10	%	ASTM D570
Mechanical		Typical Value	Unit	Test method
Tensile Modulus <sup>1</sup> (23°C)			MPa	ASTM D638
Tensile Strength <sup>1</sup>				ASTM D638
Yield, 23°C		30.0	MPa	
Break, 23°C		54.0	MPa	
Tensile Elongation <sup>1</sup>				ASTM D638
Yield, 23°C		5.0	%	
Break, 23°C		250	%	
Flexural Modulus <sup>2</sup> (23°C)		1690	MPa	ASTM D790
Flexural Strength <sup>2</sup> (23°C)		47.0	MPa	ASTM D790
Coefficient of Friction				ASTM D1894
vs. Itself - Dynamic		0.20		
vs. Itself - Static		0.20		
Impact		Typical Value	Unit	Test method
Notched Izod Impact (23°C, 3.2	0 mm)	No Break		ASTM D256
Hardness		Typical Value	Unit	Test method
Rockwell Hardness (R-Scale)		90		ASTM D785
Durometer Hardness (Shore D)		75		ASTM D2240
Thermal		Typical Value	Unit	Test method
Deflection Temperature Under	Load			ASTM D648
0.45 MPa, Unannealed		90.0	°C	
1.8 MPa, Unannealed		65.0	°C	

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Thermal	Typical Value Unit	Test method
Brittleness Temperature	< -76.0 °C	ASTM D746A
Glass Transition Temperature	85.0 °C	DMA
Melting Temperature	242 °C	ASTM D3418
Peak Crystallization Temperature (DSC)	222 °C	ASTM D3418
CLTE - Flow	1.0E-4 cm/cm/°C	ASTM D696
Specific Heat (23°C)	962 J/kg/ºC	ASTM D3418
Thermal Conductivity (40°C)	0.15 W/m/K	ASTM C177
Crystallization Heat	40.0 J/g	ASTM D3418
Heat of Fusion	42.0 J/g	ASTM D3418
Thermal Stability - 1% mass loss, N2	405 °C	TGA
Electrical	Typical Value Unit	Test method
Volume Resistivity <sup>3</sup> (23°C)	5.5E+16 ohms·cm	ASTM D257
Dielectric Strength (23°C, 3.20 mm)	14 kV/mm	ASTM D149
Dielectric Constant (23°C, 1 MHz)	2.57	ASTM D150
Flammability	Typical Value Unit	Test method
Flame Rating	V-0	UL 94
Oxygen Index	52 %	ASTM D2863

#### Additional Information

Storage and Handling

• Halar<sup>®</sup> melt processable fluoropolymer resins can be stored without shelf life issues when kept in a clean and dry area at ambient temperatures. Opened containers should be tightly resealed to prevent any contamination.

### Notes

Typical properties: these are not to be construed as specifications.

<sup>1</sup>50 mm/min

<sup>2</sup> 2.5 mm/min

<sup>3</sup> 50% RH

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