

Halar[®]



SOLVAY

asking more from chemistry[®]



Halar[®] ECTFE

Release Films

**SPECIALTY
POLYMERS**

Halar® ECTFE Release Films

Halar® ECTFE is a semi-crystalline, melt-processable fluoropolymer manufactured by Solvay Specialty Polymers. Release films made from this resin meet industry requirements for use in transfer printing and composites manufacturing.

Halar® ECTFE release films maintain the chemical properties, purity, low surface energy and no outgassing properties typical of standard Halar® ECTFE films. They are available in a wide range of thicknesses, widths and lengths.

Key features

- Strength, hardness and toughness
- Abrasion and wear resistant
- Good tensile and flexural properties
- Retains mechanical properties up to 180 °C (356 °F)
- Exceptional impact resistance at low temperatures

Typical properties

Property ⁽¹⁾	SI Units		US Customary Units		Test Method
Physical and Thermal Properties					
Density	1.66 – 1.70 g/cm ³		132 – 135 lb/ft ³		ASTM D1505
Thickness range	63.5 – 200 µm		2.5 – 8 mil		
Melting point	235 – 240 °C		455 – 464 °F		ASTM D3418
Mechanical Properties					
	MD	TD	MD	TD	
Stress at break, 23 °C (73 °F)	67 MPa	57 MPa	9700 psi	8300 psi	ASTM D882
Elongation at break, 23 °C (73 °F)	145 %	320 %	145 %	320 %	ASTM D882
Modulus, 23 °C (73 °F)	1700 MPa	1400 MPa	245 ksi	200 ksi	ASTM D882
Stress at yield, 23 °C (73 °F)	38 MPa	35 MPa	5500 ksi	5100 ksi	ASTM D882
Elongation at yield, 23 °C (73 °F)	5 %	3 %	5 %	3 %	ASTM D882
Tear Resistance					
	MD	TD	MD	TD	
Tear initiation, 23 °C (73 °F)	185 g	170 g	0.41 lb	0.37 lb	ASTM D1004
Tear propagation, 23 °C (73 °F)	10 N/mm	12 N/mm	1.4 ozf/in	1.7 ozf/in	ASTM D624
Free Shrink					
	MD	TD	MD	TD	
Percent at 130 °C (266 °F)	-6 %	+4 %	-6 %	+4 %	30 min in oven
Percent at 150 °C (302 °F)	-6 %	+3 %	-6 %	+3 %	30 min in oven
Percent at 200 °C (392 °F)	-4 %	+0 %	-4 %	+0 %	30 min in oven

⁽¹⁾ Measured on 63.5 µm-thick films



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