



Solef[®] PVDF

11008/0001 DATA SHEET

	<u>STANDARDS</u>	<u>UNITS</u>	<u>VALUE</u>	
<u>PHYSICAL PROPERTIES</u>				
Density	ASTM D792	g/cc	1.78	
Water Absorption (24h @ 23°C)	ASTM D570	%	co.04	
Melt Flow Index (230°C, 2.2 kg)	ASTM D1238	g/10 min.	8	
<u>MECHANICAL PROPERTIES</u>				
Tensile Strength @ Yield (2mm sheet)	ASTM D638 M	psi	4350-5075	
Ultimate Tensile Strength	ASTM D638 M	psi	2900-5800	
Elongation @ Break	ASTM D638 M	%	200-600	
Tensile Modulus (E Modulus)	ASTM D638 M	psi	159,500	
Flexural Modulus (4mm sheet)	ASTM D790	psi	145,000	
Shore D Hardness (2mm thick)	ASTM D2240		72	
IZOD Impact (notched, 4mm thick, 23°C)	ASTM D256	ft.lb./in	2.3	
Abrasion Resistance	Taber CS 10/kg	mg/1000 cycle	5-15	
Friction Coefficient (Static)	ASTM D1894		0.3	
<u>THERMAL PROPERTIES</u>				
Crystalline Melting Point	ASTM D34 18	°F	320 (160%)	
VICAT Point (4mm thick, 5 kg)	ASTM D1525	°F	208 (98°C)	
Deflection Temp. Under Load (4mm, 264 psi)	ASTM D648	°F	126 (52°C)	
Glass Transition	DMTA	°F	-20 (-29°C)	
Brittleness Temperature	ASTM D746A	°F	1 (-17°C)	
Thermal Linear Expan. Coefficient	ASTM D696	°K ⁻¹	15x10 ⁻⁵	
Thermal Conductance (20 to 150°C)	ASTM C177	W/m K	0.19	
<u>FIRE RESISTANCE</u>				
Oxygen Index (3mm thick)	ASTM D2863	%	44	
UL Classification	UL 94	V-0		
Flame Rating	ASTM D2863		S-E	
<u>ELECTRICAL PROPERTIES</u>				
Surface Resistivity	1 min., 100 V	ASTM D257	ohm	5 x 10 ¹⁴
	2 min., 500 V		ohm	2.5 x 10 ¹⁴
Volume Resistivity	after 1 min.	ASTM D257	ohm-cm	2 x 10 ¹⁴
	after 2 min.		ohm-cm	5 x 10 ¹⁴
	(1 mm thick)	ASTM D149	V/mil	600
Dielectric Strength	@ 1MHz	ASTM D150		7.1
Dielectric Constant	@ 5MHz			5.4
	@ 10MHz			4.9
	@ 1MHz	ASTM D150		0.21
	@ 5MHz			0.24
Dissipation Factor	@ 10MHz			0.30

Solvay
Polymers



a Passion for Progress[®]