

KYNAR FLEX®

2750-01

Kynar Flex® resins are fluorinated thermoplastic copolymers.

Outstanding characteristics: chemical resistance, imperviousness to UV, barrier properties and high purity.

Kynar Flex® 2750-01 resin is a grade of granules to be used where maximum flexibility or impact strength is required. This product is **NSF/ANSI/CAN 61** certified.

A powder form is available as **Kynar Flex® 2751 resin**.

PROPERTIES	VALUE	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	1.9	cm ³ /10 min	ISO 1133
Temperature	230	°C	-
	446	°F	-
Load	5	kg	-
	11	lb	-
Melt Flow Rate	4 - 14	g/10min	ASTM D1238
Temperature	230	°C	-
Load	12.5	kg	-
Melt Viscosity, 230°C, 100 s ⁻¹	20 - 25	kPoise	ASTM D3835
MECHANICAL PROPERTIES			
Tensile Modulus	526	MPa	ISO 527-1/-2
	76300	psi	
Tensile Modulus, 73 °F	276 - 448	MPa	ASTM D638
	40000 - 65000	psi	
Yield Stress	21	MPa	ISO 527-1/-2
	3050	psi	
Tensile Strength at Yield, 73 °F	13.8 - 21.4	MPa	ASTM D638
	2000 - 3100	psi	
Yield Strain	15	%	ISO 527-1/-2
Elongation at Yield, 73 °F	15 - 25	%	ASTM D638
Nominal Strain at Break	>50	%	ISO 527-1/-2
Tensile Strength at Break, 73 °F	20 - 27.6	MPa	ASTM D638
	2900 - 4000	psi	
Elongation at Break, 73 °F	200 - 400	%	ASTM D638
Taber Abrasion, CS 17 1000g:pad	21 - 25	mg/1000 cycles	ASTM-G195-13A

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Hardness, Shore D, 73 °F	57 - 62	-	ASTM D2240
Flexural Modulus, 73 °F	276 - 414	MPa	ASTM D790
	40000 - 60000	psi	
Flexural Strength @ 5% Strain, 73 °F	13.8 - 24.1	MPa	ASTM D790
	2000 - 3500	psi	
Compressive Strength, 73 °F	24.1 - 31	MPa	ASTM D695
	3500 - 4500	psi	
Charpy Notched Impact Strength, +23°C	No Break	kJ/m ²	ISO 179/1eA
Notched Impact Strength, 73 °F	No Break	kJ/m	ASTM D256
Coefficient of Friction, Static vs. Steel, 73 °F	0.55	-	ASTM D1894
Coefficient of Friction, Dynamic vs. Steel, 73 °F	0.54	-	ASTM D1894
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	134	°C	ISO 11357-1/-3
Melting Point	130 - 138	°C	ASTM D3418
Glass Transition Temperature, 10°C/min	-40	°C	ISO 11357-1/-2
Glass Transition Temperature (Tg)	-40	°C	ASTM D7028
Temp. of Deflection Under Load, 1.80 MPa	43	°C	ISO 75-1/-2
	109	°F	
Heat Deflection Temperature, 264 Psi, 248 °F/hr	35 - 51.7	°C	ASTM D648
	95 - 125	°F	
Temp. of Deflection Under Load, 0.45 MPa	57	°C	ISO 75-1/-2
	135	°F	
Heat Deflection Temperature, 66 Psi, 248 °F/hr	48.9 - 65.6	°C	ASTM D648
	120 - 150	°F	
Vicat Softening Temperature, 50°C/h 50N	61	°C	ISO 306
	142	°F	
Coeff. of Linear Thermal Expansion, parallel	177	E-6/K	ISO 11359-1/-2
Coefficient of Thermal Expansion, 73 °F	16.2 - 21.6	10E-5/	ASTM D696
	9 - 12	°C 10E-5/	
Burning Behav. at 1.5 mm Nominal Thickness	V-0	°F class	IEC 60695-11-10
	Thickness Tested	1.6	mm
0.0630		in	
Burning Behav. at Thickness h	V-0	class	IEC 60695-11-10
	Thickness Tested	0.8	mm
0.0315		in	

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Oxygen Index	49	%	ISO 4589-1/-2
Limiting Oxygen Index	43	%	ASTM D2863
Thermal Conductivity	0.144 - 0.18 1 - 1.25	W/(m K) BTU in	ASTM D433
Specific Heat	745 - 958 0.28 - 0.36	J/(kg K) BTU/(l	DSC
Thermal Decomposition TGA, in air	375 707	°C °F	1% wt. loss
Thermal Decomposition TGA, in nitrogen	410 770	°C °F	1% wt. loss
ELECTRICAL PROPERTIES			
Relative Permittivity, 100Hz	11.5	-	IEC 60250
Relative Permittivity, 1MHz	7	-	IEC 60250
Dielectric Constant, 1 kHz	3.8 - 12.1	-	ASTM D150
Dissipation Factor, 100Hz	240	E-4	IEC 60250
Dissipation Factor, 100 kHz	0.02 - 0.24	-	ASTM D150
Volume Resistivity	2E12	Ohm* m	IEC 62631-3-1
Volume Resistivity, DC 68 °F, 65% R.H.	2E14	Ohm*c m	ASTM D257
Surface Resistivity, 73 °F	4.8E11 - 5.1E11	Ohm per square	ASTM D257
Dielectric (Electric) Strength, 73°F	1.1 - 1.3	kV/mil	ASTM D149
OTHER PROPERTIES			
Water Absorption, 23°C, immersion, equilibrium	0.03	%	ISO 62
Water Absorption	0.03 - 0.06	%	ASTM D570
Density	1780 1.78	kg/m ³ g/cm ³	ISO 1183
Specific Gravity, 73 °F	1.78 - 1.8	-	ASTM D792
OPTICAL PROPERTIES			
Refractive Index @ sodium D line	1.41	-	ASTM D542

MAIN APPLICATIONS:

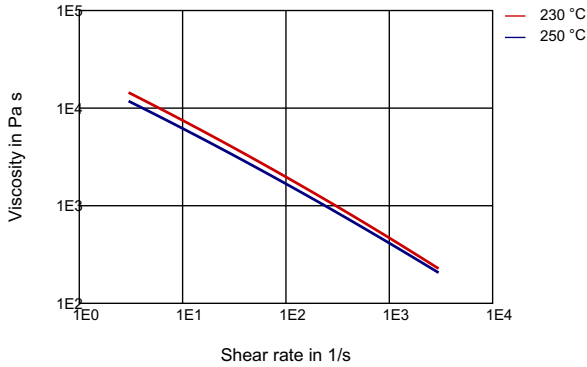
- flexible tubing
- corrosion protection in the chemical industry
- off-shore
- wire and cable

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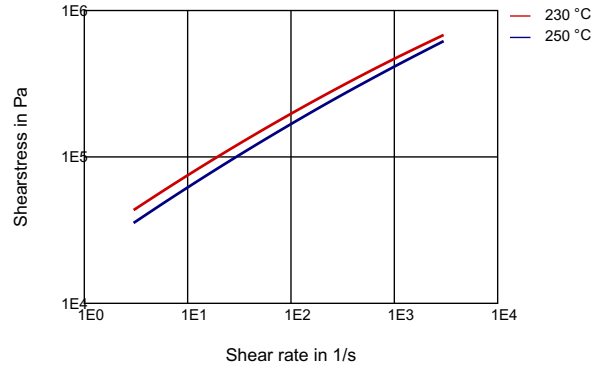
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DIAGRAMS

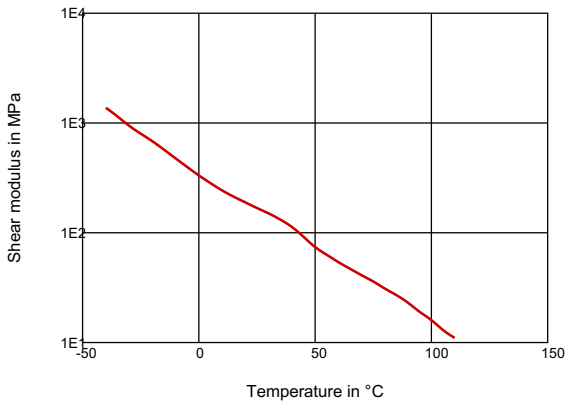
VISCOSITY-SHEAR RATE



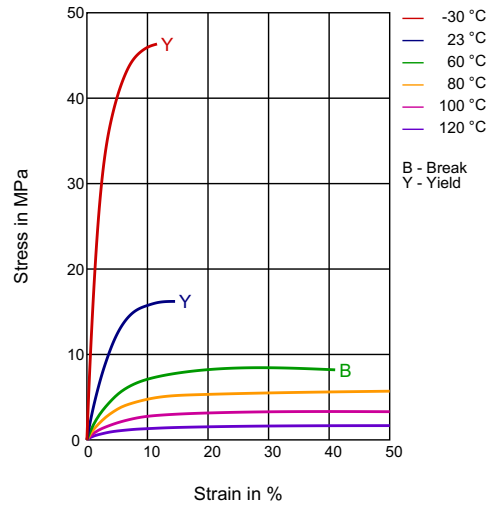
SHEARSTRESS-SHEAR RATE



DYN. SHEAR MODULUS-TEMPERATURE



STRESS-STRAIN

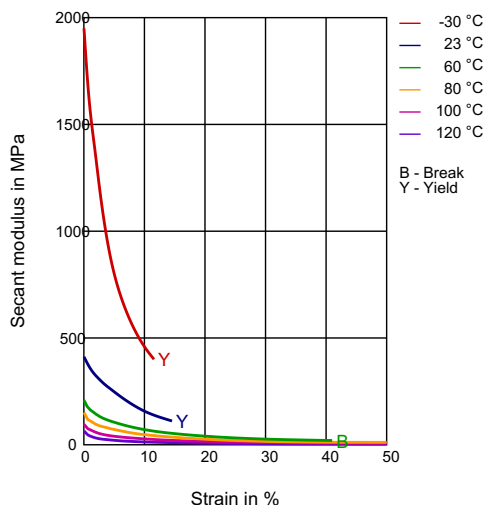


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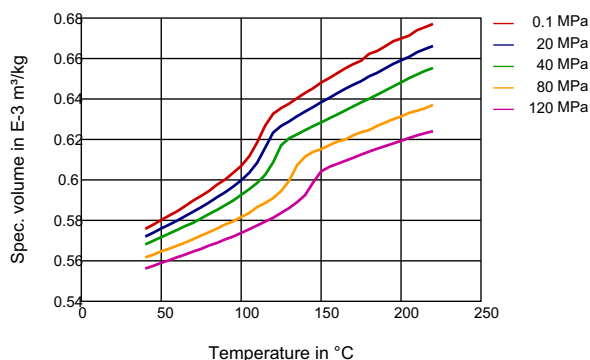
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SECANT MODULUS-STRAIN



SPECIFIC VOLUME-TEMPERATURE (PVT)



<p>PROCESSING</p> <p>Injection Molding, Sheet Extrusion, Other Extrusion, Transfer Molding</p>	<p>Headquarters:</p> <p>Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com</p>
<p>DELIVERY FORM</p> <p>Pellets</p>	
<p>SPECIAL CHARACTERISTICS</p> <p>Heat Stabilized, Light Stabilized</p>	<p>Arkema Inc. – High Performance Polymers</p> <p>900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com</p>
<p>REGIONAL AVAILABILITY</p> <p>North America, Europe, Asia Pacific, South and Central America, Near East/Africa</p>	

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