

KYNAR® 741

Kynar® resins are fluorinated thermoplastic homopolymers.

Outstanding characteristics: chemical resistance, imperviousness to UV, high barrier properties, high purity, good mechanical and thermo-mechanical properties.

MAIN CHARACTERISTICS

PROPERTIES	VALUE	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	1.13	cm ³ /10min	ISO 1133
Temperature	230	°C	-
Load	5	kg	-
Melt Flow Rate	1.5 - 3	g/10min	ASTM D1238
Temperature	230	°C	-
Load	5	kg	-
Molding Shrinkage, parallel	2.5	%	ISO 294-4, 2577
Molding Shrinkage, normal	2.5	%	ISO 294-4, 2577
Melt Viscosity, 230°C, 100 s-1	15 - 23	kPoise	ASTM D3835
MECHANICAL PROPERTIES			
Tensile Modulus	2000	MPa	ISO 527-1/-2
Tensile Modulus, 73 °F	1380 - 2310	MPa	ASTM D638
Yield stress	50	MPa	ISO 527-1/-2
Tensile Strength at Yield, 73 °F	44.8 - 55.2	MPa	ASTM D638
Yield strain	9	%	ISO 527-1/-2
Elongation at Yield, 73 °F	5 - 10	%	ASTM D638
Nominal Strain at Break	>50	%	ISO 527-1/-2
Tensile Strength at Break, 73 °F	34.5 - 55.2	MPa	ASTM D638
Elongation at Break, 73 °F	20 - 100	%	ASTM D638
Taber Abrasion, CS 17 1000g:pad	5 - 9	mg/1000 cycles	ASTM-G195-13A
Hardness, Shore D, 73 °F	76 - 80	-	ASTM D2240
Flexural Modulus, 73 °F	1380 - 2310	MPa	ASTM D790
Flexural Stength @ 5% Strain, 73 °F	58.6 - 75.8	MPa	ASTM D790
Compressive Strength, 73 °F	68.9 - 103	MPa	ASTM D695
Charpy Notched Impact Strength, +23°C	25	kJ/m ²	ISO 179/1eA
Unnotched Impact Strength, 73 °F	1.07 - 4.27	kJ/m	ASTM D256
Notched Impact Strength, 73 °F	0.0961 - 0.214	kJ/m	ASTM D256
Coefficient of Friction, Static vs. Steel, 73 °F	0.2	-	ASTM D1894
Coefficient of Friction, Dynamic vs. Steel, 73 °F	0.14	-	ASTM D1894
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	170	°C	ISO 11357-1/-3

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SJC/11-2018

Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/en/products/product-safety/disclaimer/index.html>

KYNAR®
BY ARKEMA

KYNAR® 741

Melting Point, 73 °F	165 - 172	°C	ASTM D3418
Glass Transition Temperature, 10°C/min	-40	°C	ISO 11357-1/-2
Glass Transition Temperature (Tg)	-40.6 - -38.3	°C	ASTM D7028
Temperature Rating	150	°C	UL RTI
Temp. of Deflection Under Load, 1.80 MPa	104	°C	ISO 75-1/-2
Heat Deflection Temperature, 264 Psi, 248 °F/hr	105 - 115	°C	ASTM D648
Temp. of Deflection Under Load, 0.45 MPa	150	°C	ISO 75-1/-2
Heat Deflection Temperature, 66 Psi, 248 °F/hr	125 - 140	°C	ASTM D648
Coeff. of Linear Thermal Expansion, parallel	150	E-6/K	ISO 11359-1/-2
Coeff. of Linear Thermal Expansion, normal	150	E-6/K	ISO 11359-1/-2
Coefficient of Thermal Expansion, 73 °F	11.9 - 14.4	10E-5/°C	ASTM D696
Burning Behav. at 1.5 mm Nominal Thickness	V-0	class	IEC 60695-11-10
Yellow Card available	yes	-	-
Burning Behav. at Thickness h	V-0	class	IEC 60695-11-10
Thickness Tested	0.8	mm	-
Oxygen Index	43	%	ISO 4589-1/-2
Limiting Oxygen Index, 73 °F	44	%	ASTM D2863
Thermal Conductivity	0.17 - 0.19	W/(m K)	ASTM D433
Specific Heat	745 - 958	J/(kg K)	DSC
Thermal Decomposition TGA, in air	375	°C	1% wt. loss
Thermal Decomposition TGA, in nitrogen	410	°C	1% wt. loss
Relative Thermal Index, Mechanical	150	°C	UL 746B
Relative Thermal Index, Electrical	150	°C	UL 746B
ELECTRICAL PROPERTIES			
Dielectric Constant, 1 kHz	4.5 - 9.5	-	ASTM D150
Dissipation Factor, 100 kHz	0.01 - 0.21	-	ASTM D150
Volume Resistivity, DC 68 °F, 65% R.H.	2E14	Ohm*cm	ASTM D257
Dielectric (Electric) Strength, 73°F	1.7	kV/mil	ASTM D149
OTHER PROPERTIES			
Water Absorption	0.02	%	Sim. to ISO 62
Water Absorption	0.01 - 0.03	%	ASTM D570
Density	1780	kg/m³	ISO 1183
Specific Gravity, 73 °F	1.77 - 1.79	-	ASTM D792
Thermal conductivity of melt	0.19	W/(m K)	-

MAIN APPLICATIONS:

- corrosion protection in the chemical industry
- wire and cable
- coating (painting, co-extrusion)
- PPA
- off-shore
- attery

Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/en/products/product-safety/disclaimer/index.html>

KYNAR®
BY ARKEMA

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SBC/11-2018

KYNAR® 741

PROCESSING

Other Extrusion

DELIVERY FORM

Powder

REGIONAL AVAILABILITY

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Arkema France - A French "société anonyme" registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790
SIC/11-2018

Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/en/products/product-safety/disclaimer/index.html>

Kynar® is a registered trademark of Arkema
© 2022 Arkema Inc. All rights reserved.

kynar.com

Arkema Inc. – Technical Polymers
900 First Avenue
King of Prussia, PA 19406
Tel.: +1 610 205 7000
Fax: +1 610 205 7497
arkema-america.com

KYNAR®
BY ARKEMA

Headquarters: Arkema France
420, rue d'Estienne d'Orves
92705 Colombes Cedex – France
Tel.: +33 1 49 00 80 80
Fax: +33 1 49 00 83 96
arkema.com