

TECHNICAL DATA SHEET

KYNAR FLEX[®] 3120-10

FLUORINATED COPOLYMER PELLET

KYNAR FLEX[®] resins are fluorinated thermoplastic copolymers.
KYNAR FLEX[®] 3120-10 resin is a pelletized, flexible, semi-crystalline copolymer. This product is NSF/ANSI/CAN 61 certified.
KYNAR FLEX[®] 3120-10 resin is a fluid grade that can be extruded or injection molded to make final products with a 150°C rating.

- Additional characteristics:
- Excellent thermal stability
 - Excellent abrasion resistance
 - UL RTI temperature rating of 150°C
 - Impervious to UV degradation

TYPE

PVDF

MAIN APPLICATIONS

- Plenum Conduit
- Plenum Cable

DELIVERY FORM

- Pellets

RHEOLOGICAL PROPERTIES

プロパティ	価値	UNIT	テスト基準
Melt viscosity, 230°C (445°F) at 100 s-1	5 - 13	kPo	ASTM D3835
Melt flow index (MFR), 235°C / 5 kg (455°F / 11 lb)	4 - 12	g/10min	ASTM D1238
Melt volume flow rate (MVR)	4	cm³/10min	ISO 1133

MECHANICAL PROPERTIES

プロパティ	価値	UNIT	テスト基準
Yield stress, 23°C (73°F)	24.1 - 34.5	MPa	ASTM D638
Yield strain, 23°C (73°F), 50 mm/min	15	%	ISO 527-1/-2
Stress at break, 23°C (73°F)	34.5 - 48.3	MPa	ASTM D638
Nominal strain at break, 23°C (73°F), 50 mm/min	>50	%	ISO 527-1/-2
Compression strength, 23°C (73°F)	31 - 41.4	MPa	ASTM D695
Izod impact unnotched strength, 23°C (73°F)	No Break		ASTM D256
Izod impact notched strength, 23°C (73°F)	No Break		ASTM D256
Charpy notched impact strength, 23°C (73°F)	No Break		ISO 179 1eA
Hardness, Shore D	65 - 70		ASTM D2240
Flexural modulus, 23°C (73°F)	621 - 827	MPa	ASTM D790
Tensile modulus, 23°C (73°F)	700	MPa	ASTM D638

KYNAR FLEX® 3120-10

プロパティ	価値	UNIT	テスト基準
Coefficient of friction dynamic vs steel, 23°C (73°F)	0.3		ASTM D1895
Coefficient of friction static vs steel, 23°C (73°F)	0.31		ASTM D1894
Abrasion resistance, Wheel CS 17, load 1 kg, 1000 cycles	16 - 19	mg	ASTM G195-13A

THERMAL PROPERTIES

プロパティ	価値	UNIT	テスト基準
Glass transition temperature, 10°C/min	-40	°C	ISO 11357-1/-2
Limiting oxygen index (LOI)	42	%	ASTM D2863
Yellow card available	yes		
Coefficient of linear thermal expansion, 23°C (73°F)	126 - 185	10E-6 / °K	ASTM D696
Specific heat temperature, 23°C (73°F)	745 - 958		ISO 11357-1/-2
Heat deflection temperature, 1.8 MPa	50	°C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa, 138°C/h	43.3 - 54.4	°C	ASTM D648
Heat deflection temperature, 0.45 MPa, 138°C/h	54.4-76.7	°C	ASTM D648
Thermal conductivity	0.144 - 0.18	W/m-K	ASTM D433
Melting temperature, 10°C/min	165	°C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

プロパティ	価値	UNIT	テスト基準
Dielectric constant, 1kHz	3.2 - 10.2		ASTM D150
Dielectric strength, 23°C (73,4°F)	1.3 - 1.5	kV/mm	ASTM D149
Relative thermal index	150		
Dissipation factor	0.02 - 0.19		ASTM D150

OTHER PROPERTIES

プロパティ	価値	UNIT	テスト基準
Specific gravity, 23°C (73°F)	1.77 - 13.8	g/cm³	
Water absorption, Saturated in water at 23°C (73°F)	0.03	%	ISO 62

包装

- Available packaging:
- 25 kg / 55 lb rigid container
 - 680 kg / 1500 lb big bag
 - 600 kg / 1320 lb 硬質容器

SPECIAL CHARACTERISTICS

- Flame & smoke

Headquarter: Arkema France
51, Esplanade du Général de Gaulle
92800 Puteaux – France
T +33 (0)1 49 00 80 80