

TECHNICAL DATA SHEET

KYNAR FLEX[®] 3120-50

FLUORINATED COPOLYMER PELLET

KYNAR FLEX[®] resins are fluorinated thermoplastic copolymers.
KYNAR FLEX[®] 3120-15 resin has been specifically designed for use in wire and cable constructions which require a 150°C rating and improve flame and smoke resistance.
KYNAR FLEX[®] 3120-15 resin is easily processed and has excellent physical, mechanical, thermal and flame resistant characteristics. Its low viscosity allows easy processing.

- Additional Characteristics:
- Excellent thermal stability
 - Excellent abrasion resistance
 - High Limiting Oxygen Index
 - Extremely low smoke emission characteristics

TYPE

PVDF

MAIN APPLICATIONS

- 플레넘 전선관
- 플레넘 케이블

- 배송 방식
- 펠릿
- 첨가제
- 윤활제

RHEOLOGICAL PROPERTIES

속성	값	UNIT	테스트 표준
Melt viscosity, 230°C (445°F) at 100 s-1	20 - 26	kPo	ASTM D3835
Melt flow index (MFR), 235°C / 5 kg (455°F / 11 lb)	2.5 - 7.5	g/10min	ASTM D1238
Melt volume flow rate (MVR), 230°C / 12.5 kg (445°F / 27.5 lb)	0.5	cm³/10min	ISO 1133

MECHANICAL PROPERTIES

속성	값	UNIT	테스트 표준
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

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속성	값	UNIT	테스트 표준
Flexural modulus, 23°C (73°F)	621 - 827	MPa	ASTM D790
Tensile modulus, 23°C (73°F)	700	MPa	ASTM D638
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
속성	값	UNIT	테스트 표준
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

THERMAL PROPERTIES ELECTRICAL PROPERTIES

속성	값	UNIT	테스트 표준
Dielectric constant, 1kHz	3.2 - 10.2		ASTM D150
Surface resistivity, 23°C (73.4°F)	5.3E+11 - 5.5E+11	ohm/sq	ASTM D257
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

속성	값	UNIT	테스트 표준
Specific gravity, 23°C (73°F)	1.75 - 1.77	g/cm³	
Water absorption, Saturated in water at 23°C (73°F)	0.03	%	ISO 62

포장

- Available packaging:
- 850 kg / 1870 lb 경질 용기
 - 25 kg / 55 lb rigid container
 - 500 kg 대형 가방
 - 680 kg / 1500 lb big bag
 - 600 kg / 1320 lb 경질 용기
 - 750 kg / 1650 lb 강성 컨테이너

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특징

- 불과 연기

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