

KYNAR FLEX®

TECHNICAL DATA SHEET

KYNAR FLEX® 3030-15

FLUORINATED COPOLYMER PELLETT

KYNAR FLEX® 3030-15 resin is a copolymer of vinylidene fluoride and hexafluoropropylene specifically designed for flexible plenum cables and tubing.

Its main characteristics are:

- Very high flexibility
- High melting point
- Excellent low temperature impact resistance
- Plenum rated

TYPE

PVDF

MAIN APPLICATIONS

- Plenum Conduit
- Plenum Cable

DELIVERY FORM

- Pellets

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melt viscosity, 230°C (445°F) at 100 s-1	7 - 13	kPo	ASTM D3835
Melt flow index (MFR), 235°C / 5 kg (455°F / 11 lb)	8 - 25	g/10min	ASTM D1238

MECHANICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Tensile modulus, 23°C (73°F)	290	MPa	ASTM D638
Yield stress, 23°C (73°F)	12.4 - 16.5	MPa	ASTM D638
Yield strain, 23°C (73°F), 50 mm/min	30	%	ISO 527-1/-2
Stress at break, 23°C (73°F)	19.3 - 24.8	MPa	ASTM D638
Nominal strain at break, 23°C (73°F), 50 mm/min	>50	%	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	241 - 379	MPa	ASTM D790
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	45 - 55		ASTM D2240
Abrasion resistance, Wheel CS 17, load 1 kg, 1000 cycles	28 - 33	mg	ASTM G195-13A

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THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Glass transition temperature, 10°C/min	-40	°C	ISO 11357-1/-2
Limiting oxygen index (LOI)	75	%	ASTM D2863
Coefficient of linear thermal expansion, 23°C (73°F)	153 - 194	10E-6 / °K	ASTM D696
Melting temperature, 10°C/min	164	°C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Surface resistivity, 23°C (73,4°F)	7.6E+11 - 7.9E+11	ohm/sq	ASTM D257
Dielectric strength, 23°C (73,4°F)	1 - 1.2	kV/mm	ASTM D149

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Specific gravity, 23°C (73°F)	1.78 - 1.82	g/cm ³	
Water absorption, Saturated in water at 23°C (73°F)	0.05	%	ASTM D570

PACKAGING

Available packaging:

- 25 kg / 55 lb rigid container
- 680 kg / 1500 lb big bag
- 680 kg /1500 lb rigid container

SPECIAL CHARACTERISTICS

- Flame & smoke