

TECHNICAL DATA SHEET

KYNAR FLEX® 2850-07

FLUORINATED COPOLYMER PELLETT

KYNAR FLEX® resins are fluorinated thermoplastic copolymers.

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

KYNAR FLEX® 2850-07 resin is a moderate viscosity version of KYNAR FLEX® 2850-00 resin in for ease of extrusion and co-extrusion.

It has a UL RTI temperature rating of 140 degrees C.

DESIGNATION

PVDF

MAIN APPLICATIONS

- Molding
- Tubing

DELIVERY FORM

- Pellets

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Melt viscosity, 230°C (445°F) at 100 s-1	16 - 20 kPo	ASTM D3835
Melt flow index (MFR), 235°C / 5 kg (455°F / 11 lb)	9 - 16 g/10min	ASTM D1238

MECHANICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Yield stress, 23°C (73°F)	31 - 41.4 MPa	ASTM D638
Yield strain, 23°C (73°F), 50 mm/min	11 %	ISO 527-1/-2
Stress at break, 23°C (73°F)	27.6 - 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)	41.4 - 58.6 MPa	ASTM D695
Izod impact unnotched strength, 23°C (73°F)	No Break	ASTM D256
Izod impact notched strength, 23°C (73°F)	0.16 - 0.427 J/m	ASTM D256
Charpy notched impact strength, 23°C (73°F)	No Break	ISO 179 1eA
Hardness, Shore D	70 - 75	ASTM D2240
Flexural modulus, 23°C (73°F)	1030 - 1240 MPa	ASTM D790
Tensile modulus, 23°C (73°F)	1300 MPa	ASTM D638
Coefficient of friction dynamic vs steel, 23°C (73°F)	0.19	ASTM D1895
Coefficient of friction static vs steel, 23°C (73°F)	0.26	ASTM D1894
Abrasion resistance, Wheel CS 17, load 1 kg, 1000 cycles	6 - 9 mg	ASTM G195-13A

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THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Limiting oxygen index (LOI)	43 %	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, 138°C/h	37.8 - 55 °C	ASTM D648
Heat deflection temperature, 0.45 MPa, 138°C/h	60-75 °C	ASTM D648
Glass transition temperature	-40.6 - -38.3 °C	ASTM D7028
Thermal conductivity	0.144 - 0.18 W/m-K	ASTM D433
Melting temperature, 10°C/min	157 °C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Dielectric constant, 1kHz	3.5 - 10.2	ASTM D150
Relative permittivity, 100Hz	6.85	IEC 60250
Relative thermal index	140	
Dissipation factor, 100Hz	0.12 E-4	IEC 60250
Dissipation factor	0.01 - 0.22	ASTM D150

OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Specific gravity, 23°C (73°F)	1.77 - 1.8 g/cm ³	
Water absorption, Saturated in water at 23°C (73°F)	0.03 %	ISO 62

SPECIAL CHARACTERISTICS

- Flame & smoke

Headquarter: Arkema France
420, rue d'Estienne d'Orves
92705 Colombes Cedex – France
T +33 (0)1 49 00 80 80

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