KYNAR FLEX®

TECHNICAL DATA SHEET

KYNAR FLEX® 2850 WR POWDER

FLUORINATED COPOLYMER POWDER

KYNAR FLEX® resins are fluorinated thermoplastic copolymers.
KYNAR FLEX® 2850 WR resin is a copolymer powder designed for rotomolding and rotolining with processing properties and high chemical resistance equivalent to KYNAR FLEX® 2850 resin.

TYPE

PVDF

MAIN APPLICATIONS

- cpi - others

DELIVERY FORM

- Powder

RHEOLOGICAL PROPERTIES

PROPERTIES	TYPICAL VALUE	UNIT	TEST STANDARD
Melt viscosity, 230°C (446°F) at 100 s-1	4 - 8	kPo	ASTM D3835
Melt flow index (MFR), 230°C / 5 kg (446°F / 11 lb)	8 - 25	g/10min	ASTM D1238
Melt volume flow rate (MVR), 230°C / 5 kg (446°F / 11 lb)	7.5	cm^3/10min	ISO 1133

MECHANICAL PROPERTIES

PROPERTIES	TYPICAL VALUE	UNIT	TEST STANDARD
Yield stress, 23°C (73°F)	31 - 41.4	MPa	ASTM D638
Yield strain, 23°C (73°F)	10	%	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	%	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	1030 - 1240	MPa	ASTM D790
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
Hardness, shore D	70 - 75		ASTM D2240
Tensile modulus, 23°C (73°F)	1275	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)	0.25		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	TYPICAL VALUE	UNIT	TEST STANDARD
Limiting oxygen index (LOI)	43	%	ASTM D2863
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	46	°C	ISO 75-1/-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	158	°C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

PROPERTIES	TYPICAL VALUE	UNIT	TEST STANDARD
Dielectric constant, 1kHz	3.5 - 10.2		ASTM D150
Dielectric strength, 23°C (73,4°F)	1.3 - 1.6	kV/mm	ASTM D149
Dissipation factor	0.01 - 0.22		ASTM D150

OTHER PROPERTIES

PROPERTIES	TYPICAL VALUE	UNIT	TEST STANDARD
Density, 23°C (73°F)	1.77 - 1.8	g/cm³	ISO 1183-1

PACKAGING

Available packaging:
- 50 kg / 110 lb plastic drum

SPECIAL CHARACTERISTICS

- Flame & smoke

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