KYNAR FLEX®

TECHNICAL DATA SHEET

KYNAR FLEX® 2850 PC POWDER

FLUORINATED COPOLYMER POWDER

Kynar Flex® resins are fluorinated thermoplastic copolymers.
Kynar Flex® 2850 PC resin powder coating is a semi-crystalline copolymer of vinylidene fluoride and hexafluoropropylene.
It has a special particle size making it ideal for spray applied powder coating on metal substrates for abrasion and corrosion protection

TYPE

PVDF

MAIN APPLICATIONS

- powder coating - 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 - 586	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)	0.26		ASTM D1894
Abrasion resistance, wheel CS 17, load 1 kg, 1000 cycles	6 - 9	mg	ASTM G195-13A

KYNAR FLEX® 2850 PC POWDER

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
Water absorption, at equilibrium at 23°C (73°F) / Immersion	0.03	%	ISO 62

PACKAGING

Available packaging:
- 4.5 kg / 10 lb pail
- 900 gram / 2 lb jar

SPECIAL CHARACTERISTICS

- Flame & smoke

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

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on https://www.arkema.com/global/en/products/product-safety/disclaimer/ which is incorporated herein by reference and made a part hereof.
Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790
arkema.com