

KYNAR FLEX® ULTRAFLEX B

Kynar Flex® resins are fluorinated thermoplastic copolymers.

Kynar Ultraflex® resin is a semi-crystalline copolymer of vinylidene fluoride and hexafluoropropylene. This copolymer is a highly flexible material that can be melt processed using typical melt processing equipment or can be easily put in solution for solution coating process. It can be supplied in as pellets for melt processing or as crumb to facilitate dissolution.

This is the most flexible **Kynar Flex® resin** grade available.

Additional characteristics:

- High flexibility
- Toughness
- Weatherability
- Solution properties

MAIN CHARACTERISTICS

PROPERTIES	VALUE	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Viscosity, 230°C, 100 s-1	12 - 20	kPoise	ASTM D3835
MECHANICAL PROPERTIES			
Tensile Modulus	80	MPa	ISO 527-1/-2
Tensile Modulus, 73 °F	34.5 - 103	MPa	ASTM D638
Yield stress	6.5	MPa	ISO 527-1/-2
Tensile Strength at Yield, 73 °F	4.83 - 8.27	MPa	ASTM D638
Yield strain	20	%	ISO 527-1/-2
Elongation at Yield, 73 °F	25 - 35	%	ASTM D638
Nominal Strain at Break	> 50	%	ISO 527-1/-2
Tensile Strength at Break, 73 °F	8.96 - 20.7	MPa	ASTM D638
Elongation at Break, 73 °F	≥ 500	%	ASTM D638
Hardness, Shore D, 73 °F	35 - 43	-	ASTM D2240
Flexural Modulus, 73 °F	68.9 - 138	MPa	ASTM D790
Charpy Notched Impact Strength, +23°C	No Break	kJ/m ²	ISO 179/1eA
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	101	°C	ISO 11357-1/-3
Melting Point, 73 °F	92 - 112	°C	ASTM D3418
Glass Transition Temperature (T _g)	-40	°C	ASTM D7028
Temp. of Deflection Under Load, 1.80 MPa	46	°C	ISO 75-1/-2
Oxygen Index	40	%	ISO 4589-1/-2
Limiting Oxygen Index, 73 °F	≥ 40	%	ASTM D2863
OTHER PROPERTIES			
Water Absorption	0.03	%	Sim. to ISO 62
Water Absorption	≤ 0.04	%	ASTM D570
Density	1770	kg/m ³	ISO 1183

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KYNARFLEX®
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KYNAR FLEX® ULTRAFLEX B

Specific Gravity, 73 °F

1.8 - 1.83

-

ASTM D792

DELIVERY FORM

Crumb

REGIONAL AVAILABILITY

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

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