

Kynar Superflex[®] 2500-20

PVDF

Kynar Superflex[®] 2500-20 resin

Kynar Superflex[®] resin is a thermoplastic fluorinated polymer.

The properties are the same as standard grades: chemical resistance, resistance to UV, low permeation, high purity, excellent mechanical behavior.

More over, this grade is very flexible and is suitable in electrical isolation cable, tubing and co-extrusion.

This grade is available as pellet form for injection, extrusion, compression.

Rheological properties

	Value	Unit	Test Standard
Melt volume-flow rate, MVR	5.8	cm ³ /10min	ISO 1133
Temperature	232	°C	-
Load	3.8	kg	-

Mechanical properties

	Value	Unit	Test Standard
Tensile Modulus	350	MPa	ISO 527-1/-2
Yield stress	15	MPa	ISO 527-1/-2
Yield strain	18	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2
Charpy notched impact strength, +23°C	N	kJ/m ²	ISO 179/1eA

Thermal properties

	Value	Unit	Test Standard
Melting temperature, 10°C/min	122	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	-34	°C	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	31	°C	ISO 75-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	1.0	mm	-
Oxygen index	44	%	ISO 4589-1/-2

Electrical properties

	Value	Unit	Test Standard
Electric strength	12	kV/mm	IEC 60243-1

Other properties

	Value	Unit	Test Standard
Water absorption	0.03	%	Sim. to ISO 62
Density	1790	kg/m ³	ISO 1183

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Characteristics

Processing

Injection Molding, Sheet Extrusion, Coating, Transfer Molding

Delivery form

Pellets

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Regional Availability

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

Chemical Media Resistance

Acids

- ✓ Acetic Acid (5% by mass) (23°C)
- ✓ Citric Acid solution (10% by mass) (23°C)
- ✓ Lactic Acid (10% by mass) (23°C)
- ✓ Hydrochloric Acid (36% by mass) (23°C)
- ✓ Nitric Acid (40% by mass) (23°C)
- ✓ Sulfuric Acid (38% by mass) (23°C)
- ✓ Sulfuric Acid (5% by mass) (23°C)
- ✓ Chromic Acid solution (40% by mass) (23°C)

Bases

- ✓ Sodium Hydroxide solution (35% by mass) (23°C)
- ✓ Sodium Hydroxide solution (1% by mass) (23°C)
- ✓ Ammonium Hydroxide solution (10% by mass) (23°C)

Hydrocarbons

- ✓ n-Hexane (23°C)
- ✓ Toluene (23°C)
- ✓ iso-Octane (23°C)

Ketones

- ✗ Acetone (23°C)

Mineral oils

- ✓ SAE 10W40 multigrade motor oil (23°C)
- ✓ SAE 10W40 multigrade motor oil (130°C)
- ✓ SAE 80/90 hypoid-gear oil (130°C)
- ✓ Insulating Oil (23°C)

Standard Fuels

- ✓ ISO 1817 Liquid 1 (60°C)
- ✓ ISO 1817 Liquid 2 (60°C)
- ✓ ISO 1817 Liquid 3 (60°C)
- ✓ ISO 1817 Liquid 4 (60°C)
- ✓ Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)
- ✓ Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)
- ✓ Diesel fuel (pref. ISO 1817 Liquid F) (23°C)
- ✓ Diesel fuel (pref. ISO 1817 Liquid F) (90°C)
- ✓ Diesel fuel (pref. ISO 1817 Liquid F) (>90°C)

Salt solutions

- ✓ Sodium Chloride solution (10% by mass) (23°C)
- ✓ Sodium Hypochlorite solution (10% by mass) (23°C)

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- ✓ Sodium Carbonate solution (20% by mass) (23°C)
- ✓ Sodium Carbonate solution (2% by mass) (23°C)
- ✓ Zinc Chloride solution (50% by mass) (23°C)

Other

- ✗ Ethyl Acetate (23°C)
- ✓ Hydrogen peroxide (23°C)
- ✗ Ethylene Glycol (50% by mass) in water (108°C)
- ✓ Water (23°C)
- ✓ Deionized water (90°C)
- ✓ Phenol solution (5% by mass) (23°C)