

## TECHNICAL DATA SHEET

# KYNAR SUPERFLEX® 2500-20 MED

## FLUORINATED COPOLYMER PELLET

KYNAR SUPERFLEX® MED is a fluorinated thermoplastic copolymer.

The SUPERFLEX® MED has outstanding chemical resistance, imperviousness to UV, high barrier properties, high purity, good mechanical properties and is resistant to gamma, steam and ETO sterilization.

Moreover, this grade is flexible and suitable in medical tubing and film applications.

KYNAR SUPERFLEX® 2500-20 MED is available in pellet form for extrusion, injection or compression. This product is tested for USP Class VI and ISO 10993 part 4 and part 5. Letters can be provided upon request.

### DESIGNATION

PVDF

### DELIVERY FORM

- Pellets

### TRANSFORMATION PROCESSES

- Injection Molding

## RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Melt viscosity, 230°C (445°F) at 100 s-1	9 - 16 kPo	ASTM D3835
Melt flow index (MFR), 235°C / 5 kg (455°F / 11 lb)	1 - 15 g/10min	ASTM D1238
Melt volume flow rate (MVR)	5.8 cm³/10min	ISO 1133

## MECHANICAL PROPERTIES

속성	값	테스트 표준
Yield stress, 23°C (73°F)	11.7 - 19.3 MPa	ASTM D638
Yield strain, 23°C (73°F), 50 mm/min	18 %	ISO 527-1/-2
Stress at break, 23°C (73°F)	13.8 - 31 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)	13.8 - 20.7 MPa	ASTM D695
Izod impact unnotched strength, 23°C (73°F)	No Break	ASTM D256
Izod impact notched strength, 23°C (73°F)	No Break	ASTM D256
Charpy notched impact strength, 23°C (73°F)	No Break	ISO 179 1eA
Hardness, Shore D	50 - 57	ASTM D2240
Flexural modulus, 23°C (73°F)	193 - 276 MPa	ASTM D790
Tensile modulus, 23°C (73°F)	350 MPa	ASTM D638
Coefficient of friction dynamic vs steel, 23°C (73°F)	0.54	ASTM D1895
Coefficient of friction static vs steel, 23°C (73°F)	0.49	ASTM D1894
Abrasion resistance, Wheel CS 17, load 1 kg, 1000 cycles	28 - 33 mg	ASTM G195-13A

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속성	값	테스트 표준
Glass transition temperature, 10°C/min	-40 °C	ISO 11357-1/-2
Limiting oxygen index (LOI)	42 %	ASTM D2863
Yellow card available	yes	
Coefficient of linear thermal expansion, 23°C (73°F)	153 - 194 10E-6 / °K	ASTM D696
Specific heat temperature, 23°C (73°F)	745 - 958	ISO 11357-1/-2
Heat deflection temperature, 1.8 MPa	31 °C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa, 138°C/h	26.7 - 37.8 °C	ASTM D648
Thermal conductivity	0.144 - 0.18 W/m-K	ASTM D433
Melting temperature, 10°C/min	122 °C	ISO 11357-1/-3

## THERMAL PROPERTIES ELECTRICAL PROPERTIES

속성	값	테스트 표준
Dielectric constant, 1kHz	4.5 - 13.5	ASTM D150
Surface resistivity, 23°C (73.4°F)	8.5E+11 - 9.2E+11 ohm/sq	ASTM D257
Volumic (transversal) resistivity, DC, 20°C (68°F)/50%RH	2.0E+12 ohm*m	ASTM D257
Dissipation factor	0.05 - 0.29	ASTM D150

## OTHER PROPERTIES

속성	값	테스트 표준
Specific gravity, 23°C (73°F)	1.8 - 1.82 g/cm <sup>3</sup>	
Water absorption, Saturated in water at 23°C (73°F)	0.05 %	ISO 62

## SPECIAL CHARACTERISTICS

- Flame & smoke

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