

## TECHNICAL DATA SHEET

# KYNAR FLEX® 2750-01

## FLUORINATED COPOLYMER PELLETT

KYNAR FLEX® resins are fluorinated thermoplastic copolymers.

Outstanding characteristics: chemical resistance, imperviousness to UV, barrier properties and high purity.

KYNAR FLEX® 2750-01 resin is a grade of granules to be used where maximum flexibility or impact strength is required. This product is NSF/ANSI/CAN 61 certified.

### DESIGNATION

PVDF

### MAIN APPLICATIONS

- Tubing
- Plenum Pipe

### DELIVERY FORM

- Pellets

## RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Melt viscosity, 230°C (445°F) at 100 s-1	20 - 25 kPo	ASTM D3835
Melt flow index (MFR), 235°C / 5 kg (455°F / 11 lb)	4 - 14 g/10min	ASTM D1238
Melt volume flow rate (MVR), 230°C / 5 kg (446°F / 11 lb)	1.9 cm³/10min	ISO 1133

## MECHANICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Flexural modulus, 23°C (73°F)	276 - 414 MPa	ASTM D790
Yield stress, 23°C (73°F)	13.8 - 21.4 MPa	ASTM D638
Yield strain, 23°C (73°F), 50 mm/min	15 %	ISO 527-1/-2
Stress at break, 23°C (73°F)	20 - 27.6 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)	24.1 - 31 MPa	ASTM D695
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	57 - 62	ASTM D2240
Tensile modulus, 23°C (73°F)	448 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)	0.55	ASTM D1894
Abrasion resistance, Wheel CS 17, load 1 kg, 1000 cycles	21 - 25 mg	ASTM G195-13A

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## THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Heat deflection temperature, 0.45 MPa	57 °C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	43 °C	ISO 75-1/-2
Glass transition temperature, 10°C/min	-40 °C	ISO 11357-1/-2
Vicat softening temperature, 50N at 50°C/h	61 °C	ISO 306
Limiting oxygen index (LOI)	43 %	ASTM D2863
Coefficient of linear thermal expansion, 23°C (73°F)	162 - 216 10E-6 / °K	ASTM D696
Specific heat temperature, 23°C (73°F)	745 - 958	ISO 11357-1/-2
Heat deflection temperature, 1.8 MPa, 138°C/h	35 - 51.7 °C	ASTM D648
Heat deflection temperature, 0.45 MPa, 138°C/h	48.9-65.6 °C	ASTM D648
Thermal conductivity	0.144 - 0.18 W/m-K	ASTM D433
Melting temperature, 10°C/min	134 °C	ISO 11357-1/-3

## ELECTRICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Dielectric constant, 1kHz	3.8 - 12.1	ASTM D150
Surface resistivity, 23°C (73,4°F)	4.8E11 - 5.1E11 ohm/sq	ASTM D257
Dielectric strength, 23°C (73,4°F)	1.1 - 1.3 kV/mm	ASTM D149
Relative permittivity, 100Hz	11.5	IEC 60250
Relative permittivity, 1MHz	7	IEC 60250
Dissipation factor, 100Hz	240 E-4	IEC 60250
Dissipation factor	0.02 - 0.24	ASTM D150

## OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Specific gravity, 23°C (73°F)	1.78 - 1.8 g/cm <sup>3</sup>	
Water absorption, Saturated in water at 23°C (73°F)	0.03 %	ISO 62

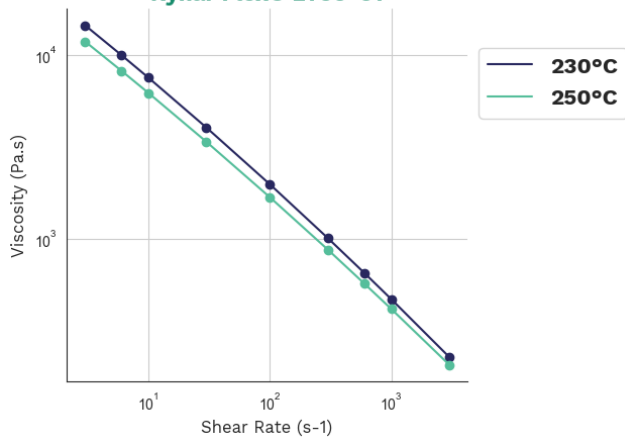
## SPECIAL CHARACTERISTICS

- Flame & smoke

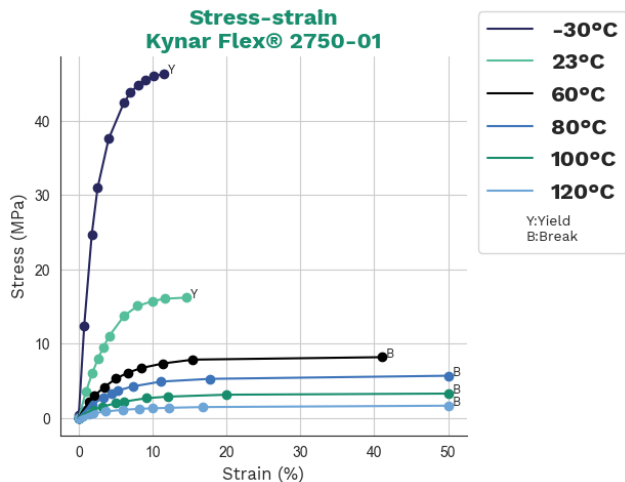
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## DIAGRAMS

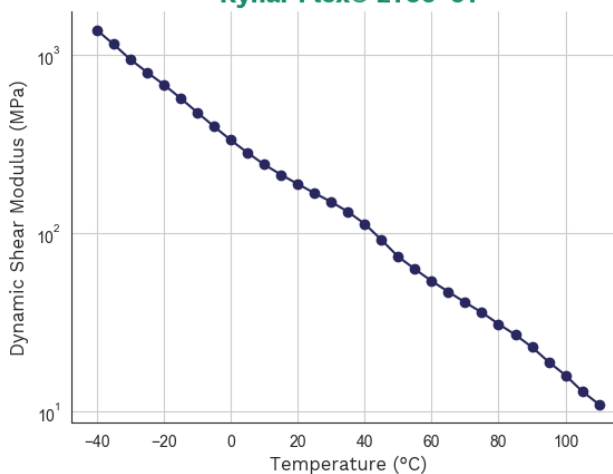
**Viscosity-shear rate**  
Kynar Flex® 2750-01



**Stress-strain**  
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**Dynamic Shear modulus-temperature**  
Kynar Flex® 2750-01



**Headquarter: Arkema France**  
420, rue d'Estienne d'Orves  
92705 Colombes Cedex – France  
T +33 (0)1 49 00 80 80

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