

# CAMPUS® Datasheet

**Kynar® 740 - PVDF**  
**ARKEMA**



## Product Texts

**Kynar® resins** are fluorinated thermoplastic homopolymers.

**Outstanding characteristics:** chemical resistance, imperviousness to UV, high barrier properties, high purity, good mechanical and thermo-mechanical properties.

**Kynar® 740 resin** is a standard grade of granules for extrusion of tubes and plaques, compression and transfer molding. This product is ANSI/NSF Standard 61 certified.

A powder form is available as **Kynar® 741 resin**.

## Main applications:

- corrosion protection in the chemical industry
- coating (painting, co-extrusion)
- off-shore
- wire and cable

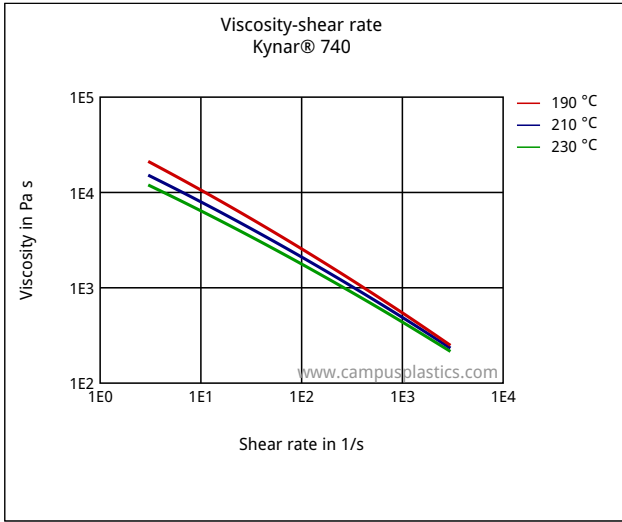
Rheological properties	Value	Unit	Test Standard
Melt volume-flow rate, MVR	1.1	cm <sup>3</sup> /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	5	kg	ISO 1133
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Molding shrinkage, normal	2.0	%	ISO 294-4, 2577
Mechanical properties	Value	Unit	Test Standard
Tensile modulus	1700	MPa	ISO 527-1/-2
Yield stress	50	MPa	ISO 527-1/-2
Yield strain	7	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2
Tensile creep modulus, 1h	1050	MPa	ISO 899-1
Tensile creep modulus, 1000h	570	MPa	ISO 899-1
Charpy impact strength, +23°C	244	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	186	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	14	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	5	kJ/m <sup>2</sup>	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	168	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	-40	°C	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	105	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	135	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	135	°C	ISO 306
Coeff. of linear therm. expansion, parallel	150	E-6/K	ISO 11359-1/-2
Burning behavior at 1.5 mm nominal thickness	V-0	class	IEC 60695-11-10
Thickness tested (1.5)	1.6	mm	IEC 60695-11-10

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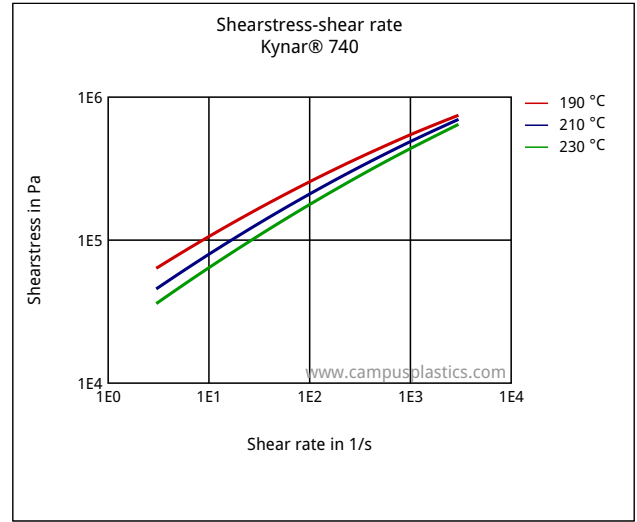
Yellow Card available	<b>Yes</b>	-	-
Burning behavior at thickness h	<b>V-0</b>	class	IEC 60695-11-10
Thickness tested (h)	<b>0.8</b>	mm	IEC 60695-11-10
Oxygen index	<b>43</b>	%	ISO 4589-1/-2
<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Relative permittivity, 100Hz	<b>11</b>	-	IEC 62631-2-1
Relative permittivity, 1MHz	<b>8</b>	-	IEC 62631-2-1
Dissipation factor, 100Hz	<b>260</b>	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	<b>2310</b>	E-4	IEC 62631-2-1
Volume resistivity	<b>2E12</b>	Ohm*m	IEC 62631-3-1
Surface resistivity	<b>&gt;1E15</b>	Ohm	IEC 62631-3-2
Electric strength	<b>21</b>	kV/mm	IEC 60243-1
Comparative tracking index	<b>600</b>	-	IEC 60112
<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Water absorption	<b>0.03</b>	%	Sim. to ISO 62
Humidity absorption	<b>0.015</b>	%	Sim. to ISO 62
Density	<b>1780</b>	kg/m <sup>3</sup>	ISO 1183
<b>Test specimen production</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Injection molding, melt temperature	<b>230</b>	°C	ISO 294
Injection molding, mold temperature	<b>90</b>	°C	ISO 294
Injection molding, injection velocity	<b>10</b>	mm/s	ISO 294
Injection molding, pressure at hold	<b>13</b>	MPa	ISO 294
Compression molding, molding temperature	<b>225</b>	°C	ISO 293
Compression molding, molding time	<b>3</b>	min	ISO 293
Compression molding, demolding temperature	<b>120</b>	°C	ISO 293

**Diagrams**

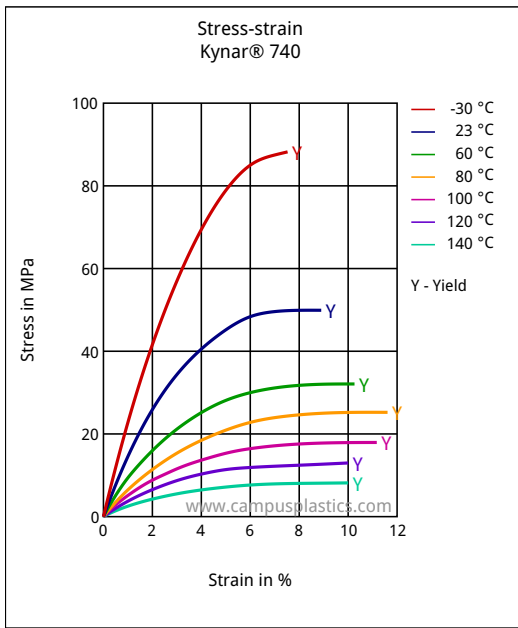
**Viscosity-shear rate**



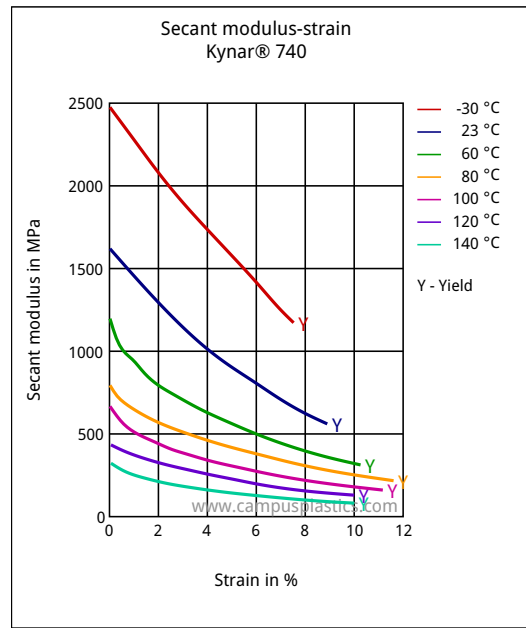
**Shearstress-shear rate**



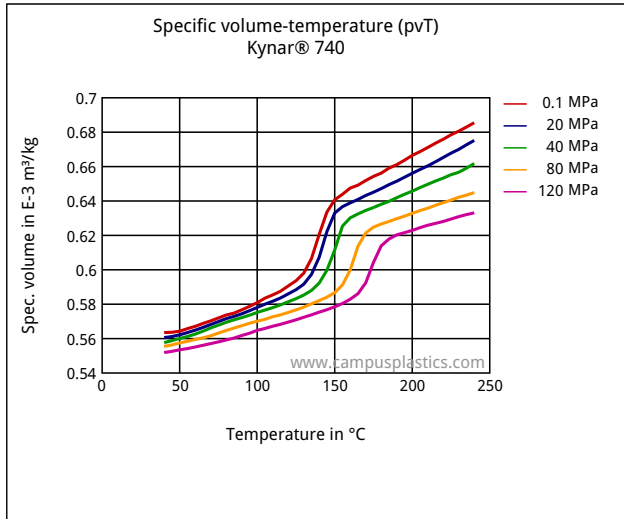
**Stress-strain**



**Secant modulus-strain**



**Specific volume-temperature (pvT)**



**Characteristics**

**Processing**

Profile Extrusion, Sheet Extrusion, Other Extrusion, Transfer Molding, Thermoforming

**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

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