# Kynar® 740

Polyvinylidene Fluoride Arkema

## Technical Data

## **Product Description**

KYNAR® 740 is a semi-crystalline medium-high molecular weight pelletized polymer of vinylidene fluoride. It is a versatile engineering plastic with an outstanding balance of physical and chemical properties which qualify it for high performance service in a wide range of applications. It is a thermoplastic fluoropolymer capable of being fabricated in standard processing equipment. The molecular weight and molecular weight distribution have been carefully tailored to supply grades suitable for a variety of processing requirements and end-use applications. KYNAR® 740 is appropriate for use in most extrusion applications and can be injection molded.

The powder form of this resin grade is available as KYNAR® 741 PVDF.

General			
Material Status	<ul> <li>Commercial: Active</li> </ul>		
Literature <sup>1</sup>	<ul> <li>Technical Datasheet (English)</li> </ul>	)	
UL Yellow Card <sup>2</sup>	<ul> <li>E54699-636465</li> </ul>		
Search for UL Yellow Card	Arkema		
Availability	<ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li></ul>	<ul><li>Europe</li><li>Latin America</li></ul>	North America
Features	<ul> <li>Medium Molecular Weight</li> </ul>	<ul> <li>Semi Crystalline</li> </ul>	
Forms	<ul> <li>Pellets</li> </ul>		
Processing Method	Extrusion	<ul> <li>Injection Molding</li> </ul>	
Multi-Point Data	<ul> <li>Isothermal Stress vs. Strain (ISO 11403-1)</li> <li>Secant Modulus vs. Strain (IS 11403-1)</li> </ul>	<ul> <li>Specific Volume vs Temperature (ISO 11403-2)</li> <li>Viscosity vs. Shear Rate (ISO 11403-2)</li> </ul>	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	1.77 to 1.79	1.77 to 1.79 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR)	6.0 to 25 g/10 min	6.0 to 25 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield, 73°F (23°C)	6500 to 8000 psi	44.8 to 55.2 MPa	
Break, 73°F (23°C)	5000 to 8000 psi	34.5 to 55.2 MPa	
Tensile Elongation (Break, 73°F (23°C))	20 to 100 %	20 to 100 %	ASTM D638
Flexural Modulus (73°F (23°C))	200000 to 335000 psi	1380 to 2310 MPa	ASTM D790
Flexural Strength (73°F (23°C))	8500 to 11000 psi	58.6 to 75.8 MPa	ASTM D790
Compressive Strength (73°F (23°C))	10000 to 15000 psi	68.9 to 103 MPa	ASTM D695
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D, 73°F (23°C))	76 to 80	76 to 80	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Peak Melting Temperature	329 to 342 °F	165 to 172 °C	ASTM D3418
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Volume Resistivity <sup>4</sup> (68°F (20°C))	2.0E+14 ohms cm	2.0E+14 ohms · cm	ASTM D257
Fill Analysis	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Viscosity (450°F (232°C), 100 sec^-1)	1500 to 2300 Pa·s	1500 to 2300 Pa·s	ASTM D3835

#### Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

<sup>4</sup> 65% R.H.

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## Kynar® 740

Polyvinylidene Fluoride Arkema

## Where to Buy

## Supplier

Arkema Paris, France Telephone: +33-1490-08080 Web: http://www.arkemagroup.com/

### Distributor

Atlantic Polymers Corp. Telephone: 914-273-0125 Web: http://www.apolymers.com/ Availability: North America

Polymix Telephone: +33-3-8920-1380 Web: http://www.polymix.eu/ Availability: France

**RESINEX Group** 

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country. Telephone: +32-14-672511 Web: http://www.resinex.com/ Availability: Europe





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