

# Arkema Kynar® MED

At NCC we provide a full range of technical polymer and additive materials for supply to the medical device and healthcare sectors. As part of our portfolio of products, we offer the full range of Arkema medical polymers, including Kynar® 720 MED.

Kynar® MED PVDF offers extreme performance where sterilisation chemical resistance, high temperatures, and high purity are required. Readily processable via extrusion and injection molding, Kynar® MED PVDF has the properties and characteristics of other medical grade fluoropolymers and compliments the other polymers in the Arkema MED portfolio.

## Typical applications for Kynar®

- Medical tubing
- Medical moulded components such as needle fittings for syringes
- Single use films for bioreactors

## **Key properties:**

- Excellent chemical resistance: Kynar® MED PVDF is inherently inert to all sterilisation chemistries, as well as organic chemistries for drug delivery systems
- High-purity: Containing no fillers, additives, or stabilisers, Kynar® MED PVDF is a high purity polymer with limited leachables and extractables
- High-thermal stability: 150°C (302°F) rated, Kynar®
  MED PVDF is able to be autoclaved
- Easily Processible: Kynar® MED PVDF can be easily injection moulded and extruded into films, tubes, and other profiles

#### Medical use

- Certifications USP Class VI, ISO 10993-4, ISO 10993-5
- Sterilisation feasibility (ETO, steam, gamma up to 10 Mrads)
- BPA and plasticiser free











Kynar® 720 MED is a fluorinated thermoplastic homopolymers.

Outstanding characteristics: chemical resistance, imperviousness to UV, high barrier properties, high purity, good mechanical and thermos-mechanical properties, resistant to gamma, steam and ETO sterilisation.

Kynar® 720 MED resin is a dedicated grade of granules for extrusion and injection molding for the medical market.

		MEDI	MEDICAL GRADE FLUOROPOLYMERS		
		KYNAR®			
PROPERTIES		VALUE	UNIT	TEST STANDARD	
MELT FLOW RATE		14 - 26.5	g/10min	ASTM D1238	
TEMPER	ATURE	230	°C	-	
LOAD		3.8	kg	-	
TENSILE MODULUS, 73 °F		200000 - 335000	psi	ASTM D638	
TENSILE STRENGTH AT YIELD, 73 °F		6500 - 8000	psi	ASTM D638	
HARDNESS, SHORE D, 73 °F		76 - 80	-	ASTM D2240	
FLEXURAL MODULUS, 73 °F		200000 - 335000	psi	ASTM D790	
FLEXURAL STRENGTH @ 5% STRAIN, 73 °F		8500 - 11000	psi	ASTM D790	
UNNOTCHED IMPACT STRENGTH, 73 °F		20 - 80	ftlb/in	ASTM D256	
NOTCHED IMPACT STRENGTH, 73 °F		1.5 - 4	ftlb/in	ASTM D256	
MELTING POINT		329 - 342	°F	ASTM D3418	
WATER ABSORTION		0.02	%	Sim. to ISO 62	
SPECIFIC GRAVITY, 73 °F		1.77 - 1.79	-	ASTM D792	

## **Processing conditions Injection:**

- Typical melt temperature (Min / Recommended / Max): 190 °C / 210-220 °C / 250 °C
- Typical mould temperature: 50 °C
- Drying time and temperature: not necessary

## **Processing conditions Extrusion:**

- Typical melt temperature (Min / Recommended / Max): 190 °C / 220-230 °C / 250 °C
- Drying time and temperature: not necessary

For further information contact us or visit ncc.ie.

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