KEPSTAN®
8002

KEPSTAN® PEKK resin is a high performance thermoplastic material, based on PolyEtherKetoneKetone (PEKK) highly stable chemical backbone. Its semi crystalline structure in solid state offers an outstanding combination of mechanical and thermal strength together with chemical and fire resistance.

The 8000 Series offers the highest glass transition temperature and the highest degree of crystallinity, leading to the best tensile and compression strengths among the wide range of PEKK copolymers within the KEPSTAN® product range.

KEPSTAN® 8000 Series includes a low flow grade, KEPSTAN® 8001, and a medium flow grade, KEPSTAN® 8002, both unfilled pure PEKK resins designed to meet the requirements of a broad range of melt processing technologies, including among others extrusion of stock shapes, tubes, films, extrusion compression, compression molding, injection molding of thick or complex and thin-walled parts.

KEPSTAN® PEKK resin is available in pellet form and in powder form with different particle sizes.
Standard packaging includes 20 kg boxes for pellets and 10 kg boxes for powders.

PROPERTIES	VALUE	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	35	cm³/10min	ISO 1133
Temperature	380	°C	-
	716	°F	
Load	5	kg	-
	11	lb	
MECHANICAL PROPERTIES			
Tensile Modulus	3800	MPa	ISO 527-1/-2
	551000	psi	
Charpy Impact Strength, +23°C	62	kJ/m²	ISO 179/1eU
	29.5	ftlb/in²	
Charpy Impact Strength, -30°C	40	kJ/m²	ISO 179/1eU
	19	ftlb/in²	
Charpy Notched Impact Strength, +23°C	4.5	kJ/m²	ISO 179/1eA
	2.14	ftlb/in²	
Charpy Notched Impact Strength, -30°C	4.5	kJ/m²	ISO 179/1eA
	2.14	ftlb/in²	
THERMAL PROPERTIES			
Temp. of Deflection Under Load, 1.80 MPa	175	°C	ISO 75-1/-2
	347	°F	
Oxygen Index	35	%	ISO 4589-1/-2
ELECTRICAL PROPERTIES			

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Relative Permittivity, 1MHz	2.6	-	IEC 60250
OTHER PROPERTIES			
Density	1290	kg/m³	ISO 1183
	1.29	g/cm³	

Drying temperature and time: 150°C for 3 to 4 hours or 120°C for 6 to 8 hours
Processing temperature: 375 – 385°C
Temperature settings - Injection: Rear 350°C / Center 375°C / Front 375°C / Nozzle 385°C
Mold temperature (to facilitate filling of the cavity and polymer crystallization): 220 - 240°C
Temperature settings - Extrusion: Zones 1/2/3/4: 340°C/ 360°C/ 380°C/ 380°C Die: 370°C

PROCESSING

Injection Molding, Profile Extrusion, Coating

DELIVERY FORM

Pellets, Powder

REGIONAL AVAILABILITY

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Headquarters:

Arkema France
420 rue d'Estienne d'Orves
92705 Colombes Cedex France
T +33 (0)1 49 00 80 80
arkema.com

Arkema Inc. – High Performance Polymers

900 First Avenue
King of Prussia, PA 19406
Tel.: +1 610 205 7000
hpp.arkema.com

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