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	cm ³ /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/in ²	
Charpy Impact Strength, -30°C	40	kJ/m²	ISO 179/1eU
	19	ftlb/in ²	
Charpy Notched Impact Strength, +23°C	4.5	kJ/m²	ISO 179/1eA
	2.14	ftlb/in ²	
Charpy Notched Impact Strength, -30°C	4.5	kJ/m²	ISO 179/1eA
	2.14	ftlb/in ²	
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			



Relative Permittivity, 1MHz	2.6	-	IEC 60250
OTHER PROPERTIES			
Density	1290	kg/m³	ISO 1183
	1.29	g/cm ³	

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	Headquarters:	
Injection Molding, Profile Extrusion, Coating	Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80	
DELIVERY FORM		
Pellets, Powder	arkema.com	
REGIONAL AVAILABILITY	Arkema Inc. – High Performance Polymers	
North America, Europe, Asia Pacific, South and Central America, Near East/Africa	900 First Avenue King of Prussia, PA 19406	
	Tel.: +1 610 205 7000 hpp.arkema.com	

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

