

KEPSTAN[®] 6004

KEPSTAN® PEKK resin is a high performance thermoplastic material, based on PolyEtherKetoneKetone (PEKK) highly stable chemical backbone. KEPSTAN® PEKK is a unique member of the PAEK family that incorporates distinctive structural features that allow for exceptional possibilities in the control of crystallinity. These features include a low Ether/Ketone ratio and a copolymer structure incorporating Terephtalic and Isophtalic moieties.

The 6000 Series represents the pseudo-amorphous products of the KEPSTAN® family, offering the lowest melting point and the slowest crystallization behavior, while keeping Tg close to 160°C. These properties allow for lower processing temperatures (as low as 320-330°C), and lead to glassy or semi crystalline structures, depending on processing technologies and cooling conditions.

KEPSTAN® 6000 Series includes a medium flow grade, KEPSTAN® 6002, and a high flow grade, KEPSTAN® 6003, both unfilled PEKK resins designed to meet the requirements of a broad range of processing technologies, including among others extrusion, calendering, thermoforming, injection molding, fiber impregnation, rotomolding, powder coating, bonding and welding.

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

PROPERTIES	VALUE		TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	24	cm ³ /10min	ISO 1133
Temperature	380	°C	-
	716	°F	
Load	1	kg	-
	2.2	lb	
MECHANICAL PROPERTIES			
Tensile Modulus	2900	MPa	ISO 527-1/-2
	421000	psi	
Charpy Impact Strength, +23°C	No Break	kJ/m²	ISO 179/1eU
Charpy Impact Strength, -30°C	No Break	kJ/m²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	5	kJ/m²	ISO 179/1eA
	2.38	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	139	°C	ISO 75-1/-2
	282	°F	
Oxygen Index	38	%	ISO 4589-1/-2
ELECTRICAL PROPERTIES			
Relative Permittivity, 1MHz	2.5	-	IEC 60250
OTHER PROPERTIES			



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Density	1270	kg/m³	ISO 1183
	1.27	g/cm³	

Drying temperature and time: 120°C for 6 to 8 hours Processing temperature: 320 – 360°C Temperature settings - Injection: Rear 300°C / Center 315°C / Front 320°C / Nozzle 330°C Mold temperature (below Tg in any case): 80 - 120°C Temperature settings - Extrusion: Zones 1/2/3/4: 290°C/ 320°C/ 330°C/ 320°C Die: 320°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

