KEPSTAN® 7002

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.

Among the **KEPSTAN® family**, the 7000 Series benefits uniquely from PEKK crystalline capabilities while reducing significantly processing temperatures compared to the more crystalline 8000 Series. With a reduced melting temperature (® decreased by 25°C) and a Tg above 160°C, the KEPSTAN® 7000 Series resins are highly enabling in the field of continuous fiber composites for structural applications.

KEPSTAN® 7000 Series includes a medium flow grade, KEPSTAN® 7002, and a high flow grade, KEPSTAN® 7003, both unfilled PEKK resins designed to meet the requirements of a broad range of melt processing technologies, including among others extrusion, injection molding, fiber impregnation, consolidation and composite forming technologies.

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.

MAIN CHARACTERISTICS

PROPERTIES	VALUE	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	6	$cm^3/10min$	ISO 1133
Temperature	380	°C	-
Load	1	kg	-
MECHANICAL PROPERTIES			
Tensile Modulus	3800	MPa	ISO 527-1/-2
Charpy Impact Strength, +23°C	62	kJ/m^2	ISO 179/1eU
Charpy Impact Strength, -30°C	41	kJ/m^2	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	4.5	kJ/m^2	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	4.5	kJ/m^2	ISO 179/1eA
THERMAL PROPERTIES			
Temp. of Deflection Under Load, 1.80 MPa	172	°C	ISO 75-1/-2
Oxygen Index	35	%	ISO 4589-1/-2
ELECTRICAL PROPERTIES			
Relative Permittivity, 1MHz	2.6	-	IEC 60250
OTHER PROPERTIES			
Density	1290	kg/m^3	ISO 1183

Drying temperature and time: 150°C for 3 to 4 hours or 120°C for 6 to 8 hours
Processing temperature: 340 – 360°C
Temperature settings - Injection: Rear 320°C / Center 340°C / Front 350°C / Nozzle 360°C
Mold temperature (to facilitate filling of the cavity and polymer crystallization): 230 - 250°C
Temperature settings - Extrusion: Zones 1/2/3/4: 290°C/ 320°C/ 350°C/ 340°C Die: 340°C

KEPSTAN® BY ARKEMA

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PROCESSING

Injection Molding, Profile Extrusion, Sheet Extrusion, Transfer Molding, Thermoforming

DELIVERY FORM

Pellets, Powder

REGIONAL AVAILABILITY

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

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790
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KEPSTAN® BY ARKEMA

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