

Jabil PK 5000 Powder

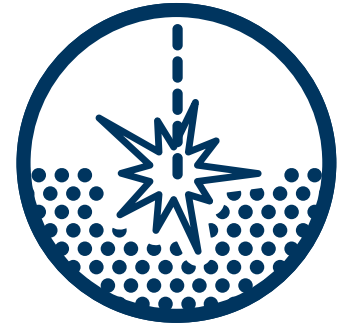
Technical Data Sheet

Product Description

Our PolyKetone is an eco-friendly and non-toxic engineered polymer made from carbon monoxide and olefins.

PK 5000 provides the perfect balance of key mechanical properties resulting in a polymer that's strong, tough and ductile.

PolyKetone is a resilient polymer that performs well in applications where low friction and wear resistance are paramount. With very good elongation and excellent impact strength, mechanical performance remains stable through a variety of environmental conditions.



Advantages

In addition to a wide processing window, other advantages include:

- Low temperature impact strength
- Excellent chemical resistance
- Physical properties and dimensional stability are not significantly affected by moisture

Storage and Use

PK 5000 must be processed in an inert environment. Recommend storing material in a closed container in a dry environment.

Properties

Mechanical Properties				
	Test Condition	Typical Value	Method	
Tensile Modulus (MPa)	XY coupons	1305	ASTM D638*	
	Z coupons	1349		
Ultimate Tensile Strength (MPa)	XY coupons	53		
	Z coupons	51		
Elongation at Break (%)	XY coupons	41		
	Z coupons	21		
Flexural Modulus (MPa)	XY coupons	1028		ASTM D790*
	Z coupons	1068		
Flexural Strength (MPa)	XY coupons	41		
	Z coupons	42		
Izod Impact Energy, notched (J/m)	XY coupons	83	ASTM D256*	
	Z coupons	70		
Izod Impact Energy, un-notched (J/m)	XY coupons	1241		
	Z coupons	776		
Izod Impact Strength, notched (kJ/m ²)	XY coupons	8	ASTM D256*	
	Z coupons	7		
Izod Impact Strength, un-notched (kJ/m ²)	XY coupons	95		
	Z coupons	59		

Other Physical Properties			
	Test Condition	Typical Value	Method
Part Color / Appearance	Ambient	Black	Visual
Part Density (g/cm ³)	Ambient	1.23	ASTM D792
Bulk Density (g/cm ³)	Ambient	0.51	ASTM D1895
Melt Temperature (°C)	Ambient	197	DSC
Particle Size Distribution (µm)	D10	35	Laser Diffraction
	D50	50	
	D90	76	
Heat Deflection Temperature (°C)	0.455 MPa	157	ASTM D648*
	1.8 MPa	126	

*Tested dry, as printed

Disclaimer: The information in this technical data sheet, including material properties, are obtained from testing representative samples under carefully controlled conditions and are provided for reference only. Material properties may be impacted by storage, handling, processing equipment/parameters, and product design, among other factors. The information is not a substitute for user testing to determine fitness for any specific use and the user is responsible for ensuring safe and lawful use of the product.

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