

AKROTEK® PEEK 8 natural (4447)

Polyetheretherketone
AKRO-PLASTIC GmbH

PROSPECTOR®

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Technical Data

Product Description

AKROTEK® PEEK 8 natural (4447) is an unreinforced medium-viscosity polyetheretherketone.

Elements in the automotive-, aeronautical-, industrial- and medical engineering that require low friction and wear values in a temperature environment above 150°C.

General

Material Status	• Commercial: Active		
Search for UL Yellow Card	• AKRO-PLASTIC GmbH		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Medium Viscosity		
Uses	• Aerospace Applications • Automotive Applications	• Industrial Applications • Medical/Healthcare Applications	
Appearance	• Natural Color		
Resin ID	• PEEK		

Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.29	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.3	--	%	
Flow	1.0	--	%	
Humidity Absorption - 62% RH (70°C)	0.20 to 0.30	--	%	ISO 1110
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	3700	3700	MPa	ISO 527-1/1
Tensile Stress (Yield)	100	100	MPa	ISO 527-2/50
Flexural Modulus ²	3800	--	MPa	ISO 178
Flexural Stress ²	155	--	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.0	6.0	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	No Break	No Break		ISO 179/1eU
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/A
1.8 MPa, Unannealed	155	--	°C	
Melting Temperature ³	342	--	°C	ISO 11357-3
CLTE - Flow (23 to 80°C)	6.0E-5	--	cm/cm/°C	ISO 11359-2
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (1.6 mm)	V-0	--		UL 94
Additional Information	Dry	Conditioned	Unit	Test Method
Reinforcement Content	0.0	--	%	ISO 1172

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 mm/min

³ 10°C/min

