KetaSpire® KT-880 NL
polyetheretherketone

KetaSpire® KT-880 NL is a high flow grade of unreinforced polyetheretherketone (PEEK) supplied in non-lubricated, natural-color pellet form. KetaSpire® PEEK is produced to the highest industry standards and is characterized by a distinct combination of properties, which include excellent wear resistance, best-in-class fatigue resistance, ease of melt processing, high purity and excellent chemical resistance to organics, acids and bases.

These properties make it well-suited for applications in healthcare, transportation, electronics, chemical processing and other industrial uses. KetaSpire® KT-880 NL can be easily processed using typical injection molding processes. This resin is also available as KT-880P in a natural-color coarse powder form for compounding.

A lubricated form of the resin is available as KT-880 in either natural (NT) or black (BK 95). The lubricated version is lightly dusted with calcium stearate (0.1% level) to aid with pellet conveyance in plastication screws.

General		
Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Features	• Chemical Resistant • Ductile • Fatigue Resistant • Flame Retardant	• Good Dimensional Stability • Good Impact Resistance • High Flow • High Heat Resistance
Uses	• Aircraft Applications • Connectors • Electrical/Electronic Applications • Film • Industrial Applications	• Medical/Healthcare Applications • Oil/Gas Applications • Pump Parts • Seals
RoHS Compliance	• Contact Manufacturer	
Appearance	• Natural Color	
Forms	• Pellets [1]	
Processing Method	• Injection Molding • Machining	• Profile Extrusion

Physical	Typical Value	Unit	Test method
Density / Specific Gravity	1.30		ASTM D792
Melt Mass-Flow Rate (MFR) (400°C/2.16 kg)	36	g/10 min	ASTM D1238
Molding Shrinkage			ASTM D955
Flow	1.7	%	
Across Flow	1.8	%	
Water Absorption (24 hr)	0.10	%	ASTM D570

KetaSpire® KT-880 NL
polyetheretherketone

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	3700	MPa	ASTM D638
Tensile Strength	100	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	5.2	%	
Break	10 to 20	%	
Flexural Modulus	3800	MPa	ASTM D790
Flexural Strength	153	MPa	ASTM D790

Impact	Typical Value	Unit	Test method
Notched Izod Impact	53	J/m	ASTM D256
Unnotched Izod Impact	No Break		ASTM D4812

Thermal	Typical Value	Unit	Test method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed	160	°C	
Glass Transition Temperature	147	°C	ASTM D3418
Peak Melting Temperature	343	°C	ASTM D3418
CLTE - Flow (-50 to 50°C)	5.0E-5	cm/cm/°C	ASTM E831

Additional Information

This material meets the requirements of ASTM D8033 PEEK0141.

Injection	Typical Value	Unit
Drying Temperature	150	°C
Drying Time	4.0	hr
Rear Temperature	355	°C
Middle Temperature	365	°C
Front Temperature	370	°C
Nozzle Temperature	375	°C
Mold Temperature	175 to 205	°C
Injection Rate	Fast	
Screw Compression Ratio	2.5:1.0 to 3.5:1.0	

Notes

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

[1] Pellets are non-lubricated. Order KT-880 NT (natural) or KT-880 BK 95 (black) for calcium stearate lubricated pellets.

KetaSpire® KT-880 NL
polyetheretherketone

www.syensqo.com

Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

Neither Syensqo nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this product, related information or its use. Some applications of which Syensqo's products may be proposed to be used are regulated or restricted by applicable laws and regulations or by national or international standards and in some cases by Syensqo's recommendation, including applications of food/feed, water treatment, medical, pharmaceuticals, and personal care. Only products designated as part of the Solviva® family of biomaterials may be considered as candidates for use in implantable medical devices. The user alone must finally determine suitability of any information or products for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. The information and the products are for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right.

All trademarks and registered trademarks are property of the companies that comprise the Syensqo or their respective owners.

© 2026 2023 Syensqo. All rights reserved.