PRODUCT SELECTION GUIDE

EDGETEK™ POLYETHERETHERKETONE (PEEK)

HIGH PERFORMING MELT-PROCESSABLE POLYMER

AVIENT™

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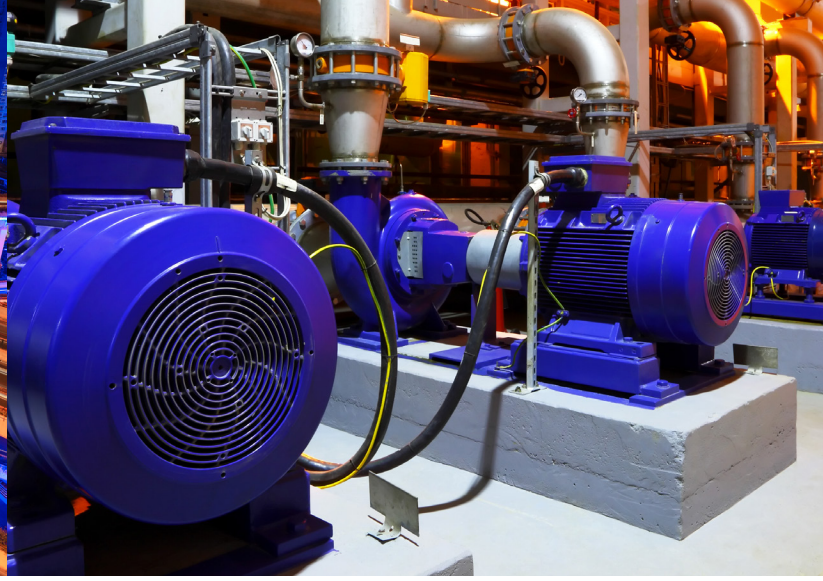
HIGH PERFORMING MELT-PROCESSABLE POLYMER

PROPERTY	CONDITIONS	TEST METHOD	UNITS	EDGETEK™ ET9800-0001 EM	EDGETEK™ ET9800-0002 RS	EDGETEK™ ET9800-0003 RS	EDGETEK™ ET9800-0004 RS EC	LUBRIONE™ LB9800-0001 AR
PHYSICAL								
Mold Shrinkage - Transverse	–	ASTM D955	in/in	0.014	0.010	0.011	0.009	0.014
MECHANICAL								
Tensile Strength - Yield	–	ASTM D638	PSI	14425	15640	23680	36500	19700
Tensile Elongation - Yield	–	ASTM D638	%	5.4	3.0	2.2	1.5	0.2
Tensile Elongation - Break	–	ASTM D638	%	19.5	3.1	2.2	1.5	1.9
Tensile Modulus	–	ASTM D638	PSI	555150	827700	1591300	5301000	2285600
Flexural Modulus	–	ASTM D790	PSI	529300	690700	1418300	3084300	1443400
Flexural Strength	–	ASTM D790	PSI	23500	27300	36000	52100	30300
IMPACT								
Izod, Notched	–	ASTM D256	ft-lbs/in	1.0	0.7	1.1	1.3	0.6
Izod, Unnotched	–	ASTM D256	ft-lbs/in	N.B.	13.1	15.3	13.8	5.0
THERMAL								
Melting Point	–	–	°C	343	343	343	343	343
Glass Transition (DSC)	–	–	°C	143	143	143	143	143
Heat Deflection Temp	264 psi, Unannealed	ASTM D648	°C	151	178	320	325	> 300
CLTE, Flow Direction	23°C to 140°C	ASTM E831	cm/cm/°C	4.0E-05	5.5E-05	2.2E-05	7.0E-06	1.9E-05
CLTE, Flow Direction	140°C to 250°C	ASTM E831	cm/cm/°C	9.7E-05	7.8E-05	2.3E-05	6.5E-06	2.2E-05



Polyetheretherketone (PEEK) is widely considered to be one of the highest performing melt-processable polymers in the industry. Avient's specialty Edgetek™ PEEK formulations are capable of withstanding extreme operating environments, and should be considered for use particularly where other engineered polymers have failed. Ideal for metal replacement, these formulations can deliver robust performance in harsh environments without compromising physical integrity.

KEY FEATURES

- High mechanical performance
- Excellent fatigue, stress-crack, oxidation and acid resistance
- Very good flame retardance with low smoke and toxicity emissions
- High temperature resistance and dimensional stability
- Excellent chemical, hydrolysis and radiation resistance

APPLICATIONS

- Aerospace
- Automotive
- Appliance
- Consumer
- Industrial
- Oil & Gas

To learn more about Edgetek™ PEEK solutions, please visit avient.com or call +1.844.4AVIENT (+1.844.428.4368).

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