Edgetek™ X ET9800-0030 RS Natural

Polyetheretherketone

PolyOne Corporation

Message:

The Edgetek® Engineering Thermoplastic Compounds portfolio covers a broad range of standard and custom-formulated high performance materials. This portfolio includes high-temperature materials for elevated service temperature environments, high-modulus / structural materials for load-bearing and high-strength applications and flame-retardant products. These compounds are based on select engineering thermoplastic resins that are compounded with reinforcing additives such as carbon fiber, glass fiber and glass beads.

Filter / Reinforcement	General Information			
Uses Automotive Applications Consumer Applications High Temperature Applications High Temperature Applications High Temperature Under Load (118 mg) Processing Method Nominal Value Nomi	Filler / Reinforcement	Glass Fiber,30% Filler by Weight		
	Features	High Heat Resistance		
Forms Pellets Processing Method Injection Molding Physical Nominal Value Unit Test Method Specific Gravity 1.54 9.020 9.030 % ASTM D955 Water Absorption (24 hr, 3.18 mm) 1.700 MPa ASTM D638 Tensile Strength 2 (Yield) 165 MPa ASTM D638 Tensile Elongation 3 (Break) 2.0 to 3.00 % ASTM D638 Flexural Modulus 1 1700 MPa ASTM D638 Flexural Modulus 1 10300 MPa ASTM D638 Flexural Strength 2 (Yield) 10300 MPa ASTM D638 Flexural Strength 10300 MPa ASTM D638 Flexural Strength 10300 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C, 3.18 mm, Injection Molded) Inj0 J/m ASTM D256A Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) Injection Molded) Inj0 J/m ASTM D256A Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) Injection Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) Injection Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) Injection Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) Injection Nominal Value Unit		Specialty Grade		
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MechanicalNominal ValueUnitTest MethodTensile Modulus 111700MPaASTM D638Tensile Strength 2 (Yield)165MPaASTM D638Tensile Elongation 3 (Break)2.0 to 3.0%ASTM D638Flexural Modulus10300MPaASTM D790ImpactVominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.18 mm, Injection Molded)110J/mASTM D256AThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm)310°CASTM D648InjectionNominal ValueUnitTest MethodProcessing (Melt) Temp388 to 399°CNOTEType I, 5.1 mm/min	Molding Shrinkage - Flow	0.20 to 0.30	%	ASTM D955
Tensile Modulus ¹ 11700 MPa ASTM D638 Tensile Strength ² (Yield) 165 MPa ASTM D638 Tensile Elongation ³ (Break) 2.0 to 3.0 % ASTM D638 Flexural Modulus 10300 MPa ASTM D790 Flexural Strength 248 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C, 3.18 mm, Injection Molded) I10 Mpa ASTM D256A Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) Injection Monded Injection Monded Injection Monded Injection Monded Injection Monded Injection Monded Injection Impact Load (1.8 MPa, Unannealed, 3.18 mm) Injection Impact Injection Injection Impact Injection Injecti	Water Absorption (24 hr, 3.18 mm)	0.10	%	ASTM D570
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Flexural Strength 248 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C, 3.18 mm, Injection Molded) 110 J/m ASTM D256A Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) 310 °C ASTM D648 Injection Molted Unit Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) 388 to 399 °C NOTE 1. Type I, 5.1 mm/min	Tensile Elongation ³ (Break)	2.0 to 3.0	%	ASTM D638
ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.18 mm, Injection Molded)110J/mASTM D256AThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm)310°CASTM D648InjectionNominal ValueUnitProcessing (Melt) Temp388 to 399°CNOTE1.Type I, 5.1 mm/min	Flexural Modulus	10300	MPa	ASTM D790
Notched Izod Impact (23°C, 3.18 mm, Injection Molded) Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) 310 C Injection Nominal Value Unit Processing (Melt) Temp 388 to 399 C NOTE 1. Type I, 5.1 mm/min	Flexural Strength	248	MPa	ASTM D790
Injection Molded)110J/mASTM D256AThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm)310°CASTM D648InjectionNominal ValueUnitProcessing (Melt) Temp388 to 399°CNOTEType I, 5.1 mm/min	Impact	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) Nominal Value Unit Processing (Melt) Temp 388 to 399 °C NOTE 1. Type I, 5.1 mm/min	•	110	J/m	ASTM D256A
MPa, Unannealed, 3.18 mm)310°CASTM D648InjectionNominal ValueUnitProcessing (Melt) Temp388 to 399°CNOTE1.Type I, 5.1 mm/min	Thermal	Nominal Value	Unit	Test Method
Processing (Melt) Temp 388 to 399 °C NOTE 1. Type I, 5.1 mm/min		310	°C	ASTM D648
NOTE 1. Type I, 5.1 mm/min	Injection	Nominal Value	Unit	
1. Type I, 5.1 mm/min	Processing (Melt) Temp	388 to 399	°C	
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2. Type I, 5.1 mm/min	1.	Type I, 5.1 mm/min		
	2.	Type I, 5.1 mm/min		

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