

Edgetek[™] ET5200-5014 NC FD Polypropylene Impact Copolymer

Key Characteristics

Product Description

The Edgetek® Engineering Thermoplastic Compounds portfolio covers a broad range of standard and customer-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, flame-retardant products as well as customer-specific compounds. These compounds are based on selected engineering thermoplastic resins containing reinforcing fillers and/or special additives.

General			
Material Status	Commercial: Active		
Regional Availability	Europe		
Features	Good Flow	Good Impact Resistance	
Uses	 Consumer Applications 	Household Goods	
Appearance	 Natural Color 		
Forms	Pellets		
Processing Method	 Injection Molding 		

Technical Properties¹

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Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ² (73°F (23°C))	1.00 g/cm ³	1.00 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/5.0 kg)	19 g/10 min	19 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/5.0 kg)	1.34 in ³ /10min	22.0 cm ³ /10min	ISO 1133
Molding Shrinkage - Flow ³			ASTM D955
73°F (23°C), 0.157 in (4.00 mm)	0.012 to 0.016 in/in	1.2 to 1.6 %	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ⁴			ISO 527
73°F (23°C), 0.157 in (4.00 mm)	276000 psi	1900 MPa	
Tensile Stress ⁵			ISO 527
Yield, 73°F (23°C), 0.157 in (4.00 mm)	3770 psi	26.0 MPa	
Tensile Strain ⁵			ISO 527
Break, 73°F (23°C), 0.157 in (4.00 mm)	> 50 %	> 50 %	
mpact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	> 8.1 ft·lb/in ²	> 17 kJ/m²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	48 ft·lb/in²	100 kJ/m²	
Additional Information			

Determination of algae resistance: very good resistance against algae with growth rate 0 Determination method: SAN BIO 33/99

Processing Information

Injection	Typical Value (English)	Typical Value (SI)	
Drying Temperature	176 °F	80.0 °C	
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr	

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Notes

¹ Typical values are not to be construed as specifications.

² ±0,03

³ Bergmann method

⁴ 0.039 in/min (1 mm/min)

⁵ 0.20 in/min (5 mm/min)

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