



# Edgetek™ ET6000-5009 NHFR White VN-3902

## Polyamide 6

### Key Characteristics

#### Product Description

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.

#### General

|                       |                      |
|-----------------------|----------------------|
| Material Status       | • Commercial: Active |
| Regional Availability | • Europe             |
| Forms                 | • Pellets            |

### Technical Properties <sup>1</sup>

| Physical                                                                      | Typical Value (English)     | Typical Value (SI)      | Test Method    |
|-------------------------------------------------------------------------------|-----------------------------|-------------------------|----------------|
| Density <sup>2</sup> (73°F (23°C))                                            | 1.19 g/cm <sup>3</sup>      | 1.19 g/cm <sup>3</sup>  | ISO 1183       |
| Mechanical                                                                    | Typical Value (English)     | Typical Value (SI)      | Test Method    |
| Tensile Modulus<br>73°F (23°C), 0.157 in (4.00 mm),<br>Injection Molded       | 508000 psi                  | 3500 MPa                | ISO 527-2/1    |
| Tensile Stress<br>Break, 73°F (23°C), 0.157 in (4.00 mm)                      | 10900 psi                   | 75.0 MPa                | ISO 527-2/5    |
| Tensile Strain<br>Break, 73°F (23°C), 0.157 in (4.00 mm),<br>Injection Molded | 3.3 %                       | 3.3 %                   | ISO 527-2/5    |
| Flexural Modulus                                                              | 464000 psi                  | 3200 MPa                | ISO 178        |
| Flexural Stress                                                               | 16000 psi                   | 110 MPa                 | ISO 178        |
| Impact                                                                        | Typical Value (English)     | Typical Value (SI)      | Test Method    |
| Charpy Notched Impact Strength<br>73°F (23°C), Injection Molded               | > 1.4 ft·lb/in <sup>2</sup> | > 3.0 kJ/m <sup>2</sup> | ISO 179        |
| Charpy Unnotched Impact Strength<br>73°F (23°C), Injection Molded             | 26 ft·lb/in <sup>2</sup>    | 55 kJ/m <sup>2</sup>    | ISO 179        |
| Electrical                                                                    | Typical Value (English)     | Typical Value (SI)      | Test Method    |
| Comparative Tracking Index                                                    | 550 V                       | 550 V                   | IEC 60112      |
| Flammability                                                                  | Typical Value (English)     | Typical Value (SI)      | Test Method    |
| Flame Rating (0.13 in (3.2 mm))                                               | V-0                         | V-0                     | UL 94          |
| Glow Wire Flammability Index<br>0.13 in (3.2 mm)                              | 1760 °F                     | 960 °C                  | IEC 60695-2-12 |

### Processing Information

| Injection              | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 176 °F                  | 80 °C              |
| Drying Time            | 4.0 hr                  | 4.0 hr             |
| Processing (Melt) Temp | 482 to 536 °F           | 250 to 280 °C      |

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**Notes**<sup>1</sup> Typical values are not to be construed as specifications.<sup>2</sup> ±0.03**CONTACT INFORMATION****Americas**United States - Avon Lake  
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