



PoliXL™ PA6GF33BK

Nylon 6, 33% Fiberglass Reinforced, Black, Heat Stabilized

| Physical | DAM | Conditioned | Test Method |
|---|------------------------|-------------|-------------|
| Specific Gravity, g/cc | 1.4 | - | D792 |
| Mold Shrinkage, % Parallel: 23 °C Perpendicular :23°C | 0.2 - 0.4 0.5 - 0.7 | <u>.</u> | D955 |
| Water Absorption, % Equilibrium, 23 °C, 50% RH | 1.8 | - | D570 |
| Ash (Glass-fiber), % | 33 | - | D2584 |

| Mechanical | DAM | Conditioned | Test Method |
|-------------------------------------|-------------------|-------------------|-------------|
| Tensile Modulus, psi (MPa) | 1,350,000 (9,310) | 1,020,000 (7,000) | ISO 527 |
| Tensile Strength (Break), psi (MPa) | 24,500 (169) | 14,500 (100) | ISO 527 |
| Tensile Strain (Break), % | 5 | 10 | ISO 527 |
| Flexural Modulus, psi (MPa) | 1,250,000 (8,630) | 1,020,000 (7,000) | ISO 178 |
| Flex Strength, psi (MPa) | 35,000 (241) | - | ISO 178 |

| Impact | DAM | Conditioned | Test Method |
|---|-----------------------|-----------------------|-------------|
| Charpy Notched Impact Strength ft-lb/ in (kJ/m²) | | | ISO 179 |
| 23 ℃ -30 ℃ | 1.87 (10) 1.69 (9) | 2.25 (12) 1.69 (9) | |
| Charpy Unnotched Impact Strength, ft-lb/in (kJ/m²) | | | ISO 179 |
| 23°C -30 °C | 14 (75) 13.1 (70) | 15 (80) 13.1 (70) | |
| Notched Izod Impact Strength, ft-lb/ in (kJ/m²) | | | ISO 180 |
| 23°C -30 °C | 2.4 (13) 2.0 (11) | 3.3 (18) 2.0 (11) | |

| Thermal | DAM | Conditioned | Test Method |
|---|------------------------|-------------|-------------|
| Heat Deflection Temperature, °F (°C) 0.45 MPa Unannealed 1.8 MPa Unannealed | 424 (218) 405 (207) | <u>:</u> | ISO 75 |
| Melting Temperature, °F (°C) | 430 (221) | - | DSC |

| Flammability | DAM | Conditioned | Test Method |
|--------------|-----|-------------|-------------|
| 0.71 mm | НВ | - | UL94 |
| 1.50 mm | НВ | - | UL94 |
| 3.00 mm | НВ | - | UL94 |



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