# TAC – W11A01

**Description:**
TAC-W11A01 is a Carbon Fiber, Graphite, and Ceramic filled Bulk Molding Compound manufactured and designed to have outstanding wear and thermal characteristics. Typical applications include wear bushings and bearings, engine components, and more.

| Mechanical Properties | Value | Unit | Test Method |
|---|---|---|---|
| Tensile Strength | 25.3 | MPa | ASTM D638 |
| Tensile Elongation at Break | 1.9% | - | ASTM D638 |
| Flexural Strength | 99 | MPa | ASTM D790 |
| Flexural Modulus | 107,677.00 | MPa | ASTM D790 |
| Un-Notched Izod Impact (1) | 123 | J/m | ASTM D256 |
| Compressive Strength | 190 -201 | MPA | Provisional |
| **Thermal Properties** | **Value** | **Unit** | **Test Method** |
| Thermal Conductivity (through plane) | 0.9 | W/m°K | C-Therm |
| Coefficient of Thermal Expansion | | - | |
| *25° to 250°* | 5.59E-06 | (µm/m°C) | TMA |
| *250°C to 280°C* | 1.60E-05 | (µm/m°C) | TMA |
| *280° to 290°C* | 4.92E-04 | (µm/m°C) | TMA |
| **Other Properties** | **Value** | **Unit** | **Test Method** |
| Glass Transition (Tg) | | | |
| *Post Baked* | 237 | °C | DMA |
| *Un-Post Baked* | 219 | °C | DMA |
| Water Absorption (2) | >.019% | - | ASTM D 570 |
| Specific Gravity | 1.94 | | ASTM D 792 |

**(1) Test conducted at a room temperature of 22°C**
**(2) Test conducted in temperature controlled water of 23°C for 24 hours**



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