

**DATA SHEET**

**PA 6/6 GLASS FILLED**

**30% Glass Filled Type 6/6 Extruded Nylon (Polyamide)**

| PROPERTY                                | UNITS          | VALUE                 |
|---|----------------|-----------------------|
| <b>MECHANICAL</b>                       |                |                       |
| Specific Gravity                        | -              | 1.29                  |
| Tensile Strength                        | psi            | 13,500                |
| Tensile Modulus                         | psi            | 675,000               |
| Elongation (at break)                   | %              | 5                     |
| Flexural Strength                       | psi            | 21,000                |
| Flexural Modulus                        | psi            | 650,000               |
| Compressive Strength                    | psi            | 18,000                |
| Hardness, Rockwell                      | -              | M75                   |
| Coefficient of Friction (Dry vs. Steel) | -              | --                    |
| Limiting PV (with 4:1 safety factor)    | psi x fpm      | --                    |
| <b>THERMAL</b>                          |                |                       |
| Coefficient of Linear Thermal Expansion | in/in/F        | $2.00 \times 10^{-5}$ |
| Heat Deflection Temperature (264 psi)   | F              | 400                   |
| Glass Transition Temperature            | F              | 145                   |
| Continuous Service Temperature          | F              | 220                   |
| Thermal Conductivity                    | BTU/in/hr.ft.F | 1.7                   |
| <b>ELECTRICAL</b>                       |                |                       |
| Dielectric Strength                     | volts/mil      | 350                   |
| Volume Resistivity                      | ohm-cm         | $>10^{13}$            |
| <b>OTHER</b>                            |                |                       |
| Water Absorption, Immersion, 24 hrs.    | % by wt.       | .3                    |
| Water Absorption, Immersion, Saturation | % by wt.       | 5.5                   |

**ENGINEERING NOTES:**

\* High Strength