

**InStruc® PA66GF30FRUV**

Americhem - Polyamide 66

## General Information

**Product Description**

30% GLASS FIBER REINFORCED, FLAME RETARDANT, UV STABILIZED NYLON 6/6

**General**

|                        |                                      |                           |                               |
|------------------------|--------------------------------------|---------------------------|-------------------------------|
| Material Status        | • Commercial: Active                 |                           |                               |
| Availability           | • Africa & Middle East               | • Europe                  | • North America               |
|                        | • Asia Pacific                       | • Latin America           |                               |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight  |                           |                               |
| Additive               | • Flame Retardant                    | • UV Stabilizer           |                               |
| Features               | • Filled                             | • Halogenated             | • UV Stabilized               |
|                        | • Flame Retardant                    | • High Stiffness          |                               |
|                        | • Good Dimensional Stability         | • High Strength           |                               |
| Uses                   | • Automotive Applications            | • Engineering Parts       | • Office Automation Equipment |
|                        | • Closures                           | • Household Goods         | • Outdoor Applications        |
|                        | • Consumer Applications              | • Industrial Applications | • Window & Door Components    |
|                        | • Electrical/Electronic Applications | • Industrial Parts        |                               |
| Forms                  | • Pellets                            |                           |                               |
| Processing Method      | • Injection Molding                  |                           |                               |

 Properties <sup>1</sup>

| Physical  | Nominal Value    | Unit     | Test Method |
|---|------------------|----------|-------------|
| Density / Specific Gravity                              | 1.66             |          | ASTM D792   |
| Molding Shrinkage - Flow                                | 1.5E-3 to 3.5E-3 | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.70             | %        | ASTM D570   |
| Mechanical  | Nominal Value    | Unit     | Test Method |
| Tensile Strength  | 20500            | psi      | ASTM D638   |
| Tensile Elongation (Yield)                              | 2.0 to 3.0       | %        | ASTM D638   |
| Flexural Modulus  | 1.55E+6          | psi      | ASTM D790   |
| Impact  | Nominal Value    | Unit     | Test Method |
| Notched Izod Impact (0.125 in)                          | 1.6              | ft·lb/in | ASTM D256   |
| Unnotched Izod Impact (0.125 in)                        | 14               | ft·lb/in | ASTM D4812  |
| Thermal   | Nominal Value    | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 475              | °F       | ASTM D648   |

## Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 175           | °F   |
| Drying Time            | 4.0           | hr   |
| Processing (Melt) Temp | 500 to 575    | °F   |
| Mold Temperature       | 200           | °F   |
| Back Pressure          | 50.0 to 100   | psi  |
| Screw Speed            | 40 to 70      | rpm  |

