

## InStruc® ABSGF15

Americhem - Acrylonitrile Butadiene Styrene

### General Information

#### Product Description

15% GLASS FIBER REINFORCED, ACRYLONITRILE BUTADIENE STYRENE (ABS)

#### General

|                        |                                                                 |                                                |                    |
|------------------------|-----------------------------------------------------------------|------------------------------------------------|--------------------|
| Material Status        | • Commercial: Active                                            |                                                |                    |
| Availability           | • Africa & Middle East<br>• Asia Pacific                        | • Europe<br>• Latin America                    | • North America    |
| Filler / Reinforcement | • Glass Fiber, 15% Filler by Weight                             |                                                |                    |
| Features               | • Filled<br>• Good Dimensional Stability                        | • High Stiffness<br>• High Strength            |                    |
| Uses                   | • Consumer Applications<br>• Electrical/Electronic Applications | • Household Goods<br>• Industrial Applications | • Industrial Parts |
| Forms                  | • Pellets                                                       |                                                |                    |
| Processing Method      | • Injection Molding                                             |                                                |                    |

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

| Physical                                                | Nominal Value    | Unit     | Test Method |
|---------------------------------------------------------|------------------|----------|-------------|
| Density / Specific Gravity                              | 1.14             |          | ASTM D792   |
| Molding Shrinkage - Flow                                | 1.0E-3 to 2.0E-3 | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.10             | %        | ASTM D570   |
| Mechanical                                              | Nominal Value    | Unit     | Test Method |
| Tensile Strength                                        | 10000            | psi      | ASTM D638   |
| Tensile Elongation (Yield)                              | 1.0 to 2.0       | %        | ASTM D638   |
| Flexural Modulus                                        | 700000           | psi      | ASTM D790   |
| Flexural Strength                                       | 15000            | psi      | ASTM D790   |
| Impact                                                  | Nominal Value    | Unit     | Test Method |
| Notched Izod Impact (0.125 in)                          | 1.3              | ft·lb/in | ASTM D256   |
| Unnotched Izod Impact (0.125 in)                        | 5.0              | ft·lb/in | ASTM D4812  |
| Thermal                                                 | Nominal Value    | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 200              | °F       | ASTM D648   |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 180           | °F   |
| Drying Time            | 2.0           | hr   |
| Suggested Max Moisture | 0.10          | %    |
| Processing (Melt) Temp | 460 to 500    | °F   |
| Mold Temperature       | 150 to 180    | °F   |
| Back Pressure          | 50.0 to 100   | psi  |
| Screw Speed            | 40 to 70      | rpm  |

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

