Polyamide Nylon 12

| General Information |  |  |
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| Product Description |  |  |
| 50\% Glass Fiber Reinforced Nylon 12 offered with various additives. |  |  |
| FEATURES | ADDITIONAL FORMULAS | COLOR |
| -Good Strength -Oil/Solvent Resistant | -Added Lubricant "L" | -All |
| -Fast Cyling -High Rigidity | -Additional UV "U" | -Translucent/Opaque |
| -Excellent Chemical Resistance | -Additonal Heat Stabilizers "HS" |  |
| -Gasoline Resistant | -Nucleated "N" |  |
| -50\% Glass Fiber Reinforced |  |  |
| General |  |  |
| Typical Applications -Appliance, automotive, general, pumps, impellers, housings |  |  |
| Processing Method -Injection |  |  |
| Form(s) -Pellets |  |  |
| Compliance -RoHS Compliant - TVT |  |  |
| Availability -North America, Europe, Latin Americ |  |  |
| ASTM / ISO Properties ${ }^{1}$ |  |  |
| Physical | Nominal Value Unit | Test Method |
| Density | $1.47 \mathrm{~g} / \mathrm{cm}^{3}$ | ASTM D792 |
| Molding Shrinkage - Flow (3.2mm) | 0.1 to 0.4 \% | ASTM D955 |
| Outdoor Suitability (QUV) ("U" Grades) | Pass | TVT Internal |
| Mechanical | Nominal Value Unit | Test Method |
| Tensile Strength, brk | 25,000 psi | ASTM D638 |
| Tensile Strain | >5 \% | ASTM D638 |
| Flexural Modulus | 1,400,000 psi | ASTM D790 |
| Notched Izod Impact | $3.0 \mathrm{ft}-\mathrm{lbs} / \mathrm{in}$ | ASTM D256 |
| Thermal | Nominal Value Unit | Test Method |
| Deflection Temperature Under Load (1.8 MPa) | $320{ }^{\circ} \mathrm{F}$ | ASTM D648 |
| Melting Point | $355{ }^{\circ} \mathrm{F}$ | TVT Internal |
| Flammability | Nominal Value Unit | Test Method |
| 0.06 in | HB | UL94 - TVT Internal |
| Recommended Processing Guidance |  |  |
| Drying Temperature | 170 to $190{ }^{\circ} \mathrm{F}$ |  |
| Drying Time - DESSICANT | 3 to 6 Hours |  |
| Suggested Max Moisture | 0.2 \% |  |
| Processing Melt Temperature | 480 to $530{ }^{\circ} \mathrm{F}$ |  |
| Mold Temperature | 130 to $195^{\circ} \mathrm{F}$ |  |
| ${ }_{1}$ INote: ine vaiues istea on tnis guiae are typicai vaiues dasea on generaı moiaing conaitions ana usea soiety tor tne purpose or generaı material processing. it is recommended that application properties be derived from actual molded articles, whereas properties as molded could vary. These are not to be used as specifications. This data does not provide an implied conditional warranty. |  |  |

