**JPPCABSI**

PCABS

**Typical Material Properties**

|  |  |  |
| --- | --- | --- |
| General |  |  |
| Material Status | Commercial: Active |  |
| Availability | North America |  |
| Forms | Pellets |  |
| Processing Method | Coextrusion | Injection Molding |
|  | Sheet Extrusion |  |

|  |  |  |
| --- | --- | --- |
| Physical Properties | Nominal Values | Test Method |
| Specific Gravity | 1.13  | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (230°C/3.8 kg) | 3.0 g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow  | 7.0E-3 in/in | ASTM D955 |
| Water Absorption |    | ASTM D570 |
| 73°F, 24 hr | 0.15 % |   |
| Equilibrium, 73°F, 50% RH | 0.32 % |   |

|  |  |  |
| --- | --- | --- |
| Hardness |  |  |
| Rockwell Hardness (R-Scale) | 115  | ASTM  |

|  |  |  |
| --- | --- | --- |
| Mechanical |  |  |
| Tensile Strength1 |    | ASTM D638 |
| Yield | 7700 psi |   |
| Break | 6500 psi |   |
| Tensile Elongation1 (Break) | 130 % | ASTM D638 |
| Flexural Modulus | 340000 psi | ASTM D790 |
| Flexural Strength (Yield) | 12000 psi | ASTM D790 |

|  |  |  |
| --- | --- | --- |
| Impact |  |  |
| Notched Izod Impact2 |    | ASTM D256 |
| -40°F, 0.125 in | 8.0 ft·lb/in |   |
| -20°F, 0.125 in | 10 ft·lb/in |   |
| 73°F, 0.125 in | 14 ft·lb/in |   |
| Instrumented Dart Impact3 |    | ASTM D3763 |
| -20°F, 0.125 in, Total Energy | 550 in·lb |   |
| 73°F, 0.125 in, Total Energy | 500 in·lb |   |

|  |  |  |
| --- | --- | --- |
| Thermal |  |  |
| Deflection Temperature Under Load |    | ASTM D648 |
| 264 psi, Unannealed, 0.125 in | 230 °F |   |
| 264 psi, Annealed, 0.125 in | 250 °F |   |
| CLTE - Flow (-40 to 180°F) | 4.1E-5 in/in/°F | ASTM D696 |

|  |  |  |
| --- | --- | --- |
| Notes |  |  |
| 1Type I, 2.0 in/min |
| 210 mil Notch Depth |
| 311.1 ft/sec |