



TRIVALENCE

TriVEX™ 16FR5 HF (U,R)

Polycarbonate + Siloxane

General Information

Product Description

Non halogenated flame retardant polycarbonate modified with siloxane for superior cold temperature impact resistance.

FEATURES

- Great Impact/Ductility (Ambient and Extreme Cold)
- High Flow and Release
- Flame Retardant
- RoHS/REACH Compliant

ADDITIONAL FORMULAS

- Added Release "R"
- Additional UV "U" - Great UV Performance

COLOR

- All
- Opaque

General

| | |
|-----------------------------|---|
| Typical Applications | -Appliance, electrical, lawn & garden, automotive, military, rescue, sporting goods |
| Processing Method | -Injection/Extrusion |
| Form(s) | -Pellets |
| Availability | -North America, Europe, Latin America |

ASTM / ISO Properties¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-------------------|---------------------|
| Density | 1.19 | g/cm ³ | ASTM D792 |
| Melt Flow Rate (300°C/1.2kg) | 15 | g/10min | ASTM D1238 |
| Molding Shrinkage - Flow (3.2mm) | 0.5 to 0.8 | % | TVT Internal |
| Outdoor Suitability (QUV) (U Grades) | Pass | | TVT Internal |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength, brk | 9000 | psi | ASTM D638 |
| Tensile Elongation | 120 | % | ASTM D638 |
| Flexural Modulus | 380000 | psi | ASTM D790 |
| Notched Izod Impact (R.T) | 16 | ft-lbs/in | ASTM D256 |
| Notched Izod Impact (-40C) | 10 | ft-lbs/in | ASTM D257 |
| Rockwell Hardness | 118 | R-Scale | ASTM D785 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (0.45 MPa) | 272 | °F | ASTM D648 |
| Deflection Temperature Under Load (1.8 MPa) | 252 | °F | ASTM D648 |
| Vicat Softening Temperature | 284 | °F | ASTM D1525 |
| CLTE - Flow | 3.4E-5 | in/in/°F | ASTM E831 |
| Flammability | Nominal Value | Unit | Test Method |
| 0.06 in | V0 | | UL94 - TVT Internal |
| 0.12 in | 5V | | UL94 - TVT Internal |
| Recommended Processing Guidance | | | |
| Drying Temperature | 230 to 250 | °F | |
| Drying Time | 3 to 6 | Hours | |
| Suggested Max Moisture | 0.02 | % | |
| Processing Melt Temperature | 550 to 600 | °F | |
| Mold Temperature | 140 to 195 | °F | |