



TRIVALENCE

TriEXO 29PEI (U,R)

Polyether Imide

| | General Information |
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|--|---------------------|

Product Description

High heat resin, PEI.

FEATURES

- High Strength
- High Temperature
- Chemical resistant
- Inherently Flame Retardant

ADDITIONAL FORMULAS

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

COLOR

- All
- Transparents

General

Typical Applications

-Appliance, electrical, lawn & garden, automotive, medical, motor housings, oil/gas, military

Processing Method

-Injection/Extrusion

Form(s)

-Pellets

Availability

-North America, Latin America

| ASTM / ISO Properties ¹ | | |
|------------------------------------|--------------------|-------------|
| | Nominal Value Unit | Test Method |

Physical

| | | |
|--|------------------------|--------------|
| Density | 1.27 g/cm ³ | ASTM D792 |
| Melt Flow Rate (337°C/6.6kg) | 10 g/10min | ASTM D1238 |
| Molding Shrinkage - Flow (3.2mm) | 0.5 to 0.7 % | TVT Internal |
| Outdoor Suitability (QUV) ("U" Grades) | Pass | TVT Internal |

Mechanical

| | Nominal Value Unit | Test Method |
|------------------------|--------------------|-------------|
| Tensile Strength, brk | 15,500 psi | ASTM D638 |
| Tensile Elongation | >50 % | ASTM D638 |
| Flexural Modulus | 500,000 psi | ASTM D790 |
| Un-Notched Izod Impact | 20 ft-lbs/in | ASTM D256 |
| Rockwell Hardness | 109 R-Scale | ASTM D785 |

Thermal

| | Nominal Value Unit | Test Method |
|--|--------------------|-------------|
| Deflection Temperature Under Load (0.45 MPa) | 410 °F | ASTM D648 |
| Deflection Temperature Under Load (1.8 MPa) | 388 °F | ASTM D648 |
| Vicat Softening Temperature | 422 °F | ASTM D1525 |
| RTI Elec | 337 °F | UL 746 |
| RTI IMP | 337 °F | UL 746 |
| RTI Str | 337 °F | UL 746 |
| CLTE - Flow | 3.1E-5 in/in/°F | ASTM E831 |

Flammability

| | Nominal Value Unit | Test Method |
|----------|--------------------|---------------------|
| 0.06 in | V0 | UL94 - TVT Internal |
| 0.125 in | 5VA | UL94 - TVT Internal |

Recommended Processing Guidance

| | |
|-----------------------------|---------------|
| Drying Temperature | 295 to 305 °F |
| Drying Time | 4 to 6 Hours |
| Suggested Max Moisture | 0.02 % |
| Processing Melt Temperature | 660 to 750 °F |
| Mold Temperature | 270 to 320 °F |