

comparator

















Hydrolysis resistant























Metal replacement

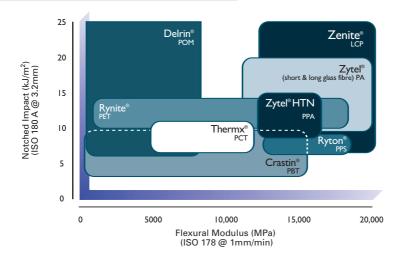


Take the strain with Distrupol's range of structural metal replacement plastics

A range of robust materials for the most demanding structural applications previously only possible in metals. Distrupol makes material selection easier by comparing some key properties. For more in-depth information, consult individual polymer keycards or data sheets.

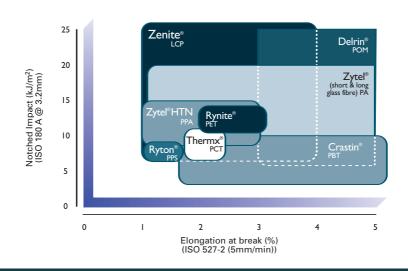
Toughness Vs Stiffness

Showing the general flexural properties relative to impact properties of various grades.



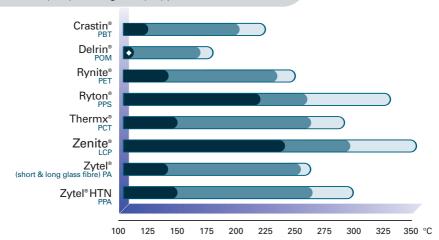
Toughness Vs Elongation

Showing the general impact properties relative to elongational properties of various toughened grades.



Thermal Properties

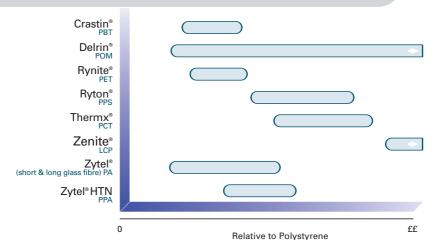
Highlighting the difference between the melting point, short term (HDT) and long term (RTI) performance of a material.



- Relative Temperature Index (RTI) 60,000 hr (UL 764B @ 3.2mm, Mech W/lmp)
 \$85°C
- Heat Deflection Temperature (HDT) (ISO 75@1.8 MPa, 3.2mm)
- OCrystalline melting point or amorphous melting region

Relative Cost

The final cost of a product depends on many factors, e.g. density, cycle times, processing temps, drying requirements etc.



| Comparing basic properties <i>within</i> the high temperature materials range selected | | ® PBT | POM | PET | PPS | * PCT | LCP | PA | HTN PPA |
|--|---------------------------------------|----------------------|---------------------|---------|--------|---------|---------|--------|------------------------|
| | | Crastin [®] | Delrin [®] | Rynite® | Ryton® | Thermx® | Zenite® | Zytel® | Zytel [®] HTN |
| | 2K moulding | • | • | | | | | • | |
| | Chemical resistance | | • | | • | | • | • | • |
| | Clear | | | | | | | | |
| | Co-Ex (co-extrusion) | • | | | | | | • | |
| | Colour | • | • | • | | • | • | • | • |
| | Dimensionally stable | • | | • | • | • | • | • | • |
| | Flectrical performance | • | | • | • | • | • | • | • |
| | Extrusion | • | | | • | | | • | |
| | Flame retardant | • | | • | • | • | • | • | • |
| | Flex crack resistance | | | | | | | • | |
| | Flexible | | | | | | | • | |
| | Food approvals | • | • | | | • | • | • | |
| | Migh flow | | | • | • | • | • | • | |
| | High temperature | • | | • | • | • | • | • | • |
| | H ₂ O Hydrolysis resistant | | | | • | | | • | • |
| | PTFE Low wear | | • | | • | | | • | |
| | ♣ Medical | • | • | • | | • | • | • | • |
| | Metal replacement | • | • | • | • | • | • | • | • |
| | Tough & strong | • | • | • | | • | • | • | • |
| | Water approvals | • | • | • | • | | | • | • |
| | | | | | | | | | |

Knowledge *that delivers...* more than just plastic **www.distrupol.com**

Weather resistant