

Chemlon® E-66 GF50

Teknor Apex Company (Chem Polymer) - Polyamide 66

Friday, June 30, 2017

| General Information | | | | |
|-------------------------------------|----------------------------------|-----------------------------------|--|--|
| Product Description | | | | |
| Chemlon® E-66 GF50 is an eco | nomy range 50% glass fibre reinf | orced Nylon 66 compound. | | |
| It is available in natural or black | versions. | | | |
| General | | | | |
| Material Status | Commercial: Active | Commercial: Active | | |
| Availability | • Europe | North America | | |
| Filler / Reinforcement | Glass Fiber, 50% F | Glass Fiber, 50% Filler by Weight | | |
| Appearance | • Black | Natural Color | | |
| Processing Method | Injection Molding | | | |

| ASTM & ISO Properties 1 | | | | |
|---|---------------|-----------|-----------------|--|
| Physical | Nominal Value | Unit | Test Method | |
| Density | 1.57 | g/cm³ | ISO 1183 | |
| Molding Shrinkage ² | 0.30 to 0.70 | % | Internal Method | |
| Water Absorption (Equilibrium, 73°F, 50% RH) | 1.3 | % | ISO 62 | |
| Mechanical | Nominal Value | Unit | Test Method | |
| Tensile Modulus | 2.18E+6 | psi | ISO 527-2 | |
| Tensile Stress (Break) | 31900 | psi | ISO 527-2 | |
| Tensile Strain (Break) | 3.0 | % | ISO 527-2 | |
| Flexural Modulus | 2.03E+6 | psi | ISO 178 | |
| Flexural Stress ³ | 43500 | psi | ISO 178 | |
| Impact | Nominal Value | Unit | Test Method | |
| Notched Izod Impact Strength | 5.2 | ft·lb/in² | ISO 180 | |
| Thermal | Nominal Value | Unit | Test Method | |
| Heat Deflection Temperature (66 psi, Unannealed) | > 482 | °F | ISO 75-2/B | |
| Heat Deflection Temperature (264 psi, Unannealed) | > 464 | °F | ISO 75-2/A | |

| Processing Information | | | | |
|------------------------|--------------------|--|--|--|
| Injection | Nominal Value Unit | | | |
| Drying Temperature | 176 °F | | | |
| Drying Time | 2.0 hr | | | |
| Rear Temperature | 536 to 572 °F | | | |
| Middle Temperature | 536 to 572 °F | | | |
| Front Temperature | 536 to 572 °F | | | |
| Processing (Melt) Temp | < 572 °F | | | |
| Mold Temperature | 176 to 194 °F | | | |
| Injection Rate | Fast | | | |
| Screw Speed | 50 to 200 rpm | | | |
| Injection Notes | · 生 其 以及 公 | | | |

Back pressure: Low
Injection pressure: High

The material is supplied dry and ready to mould in sealed, moisture proof sacks No drying is necessary unless the material has been exposed to air for longer than three hours. The appearance of splash marks on the surface of mouldings indicates excessive moisture is present. Should drying become necessary, two hours at 80°C in a dehumidifying drier is recommended. The use of air circulating driers is not generally recommended, as longer drying times are often required, with greater potential for product exidation and vellowing. Drying temperatures should not exceed 90°C. longer drying times are often required, with greater potential for product oxidation and yellowing. Drying temperatures should not exceed 80°C.

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Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² Mould shrinkage is significantly influenced by many factors including wall thickness, gating, component shape and moulding conditions. The range values stated were determined from specimen bar mouldings of 1.5mm to 4mm wall thickness. They are provided as a guide for comparison purposes only and no guarantee should be inferred from their inclusion. (Specimens measured in the dry state, 24 hours after moulding).
- ³ At Break

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