

Halar® 350DA

ethylene chlorotrifluoroethylene copolymer

| General | | | |
|---------------------------------|--|---|-------------|
| Material Status | Commercial: Active | | |
| Availability | Africa & Middle EastAsia PacificEurope | Latin AmericaNorth America | |
| Features | Medium Viscosity | | |
| Forms | Pellets | | |
| Processing Method | Extrusion | Injection Molding | |
| Physical | | Typical Value Unit | Test method |
| Density / Specific Gravity | | 1.68 | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (| 275°C/216 kg) | 4.0 g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow | 270 072.10 kg) | 2.5 % | ASTM D955 |
| Water Absorption (Equilibrium) | | < 0.10 % | ASTM D533 |
| Water Absorption (Equilibrial | , | . 0.10 70 | AOTIVI DO70 |
| Mechanical | | Typical Value Unit | Test method |
| Tensile Modulus¹ (23°C) | | 1660 MPa | ASTM D638 |
| Tensile Strength ¹ | | | ASTM D638 |
| Yield, 23°C | | 30.0 MPa | |
| Break, 23°C | | 54.0 MPa | |
| Tensile Elongation ¹ | | | ASTM D638 |
| Yield, 23°C | | 5.0 % | |
| Break, 23°C | | 250 % | |
| Flexural Modulus 2 (23°C) | | 1690 MPa | ASTM D790 |
| Flexural Strength 2 (23°C) | | 47.0 MPa | ASTM D790 |
| Coefficient of Friction | | | ASTM D1894 |
| vs. Itself - Dynamic | | 0.20 | |
| vs. Itself - Static | | 0.20 | |
| Impact | | Typical Value Unit | Test method |
| Notched Izod Impact | | Typical value of the | ASTM D256 |
| -40°C, 3.20 mm | | 95 J/m | AOTH B200 |
| 23°C, 3.20 mm | | No Break | |
| | | . = | |
| Hardness | | Typical Value Unit | Test method |
| Rockwell Hardness (R-Scale) | | 90 | ASTM D785 |
| Durometer Hardness (Shore | D) | 75 | ASTM D2240 |

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| Thermal | Typical Value Unit | Test method |
|--|--------------------|-------------|
| Deflection Temperature Under Load | | ASTM D648 |
| 0.45 MPa, Unannealed | 90.0 °C | |
| 1.8 MPa, Unannealed | 65.0 °C | |
| Brittleness Temperature | < -76.0 °C | ASTM D746A |
| Glass Transition Temperature | 85.0 °C | DMA |
| Melting Temperature | 242 °C | ASTM D3418 |
| Peak Crystallization Temperature (DSC) | 222 °C | ASTM D3418 |
| CLTE - Flow | 1.0E-4 cm/cm/°C | ASTM D696 |
| Specific Heat (23°C) | 962 J/kg/°C | ASTM D3418 |
| Thermal Conductivity (40°C) | 0.15 W/m/K | ASTM C177 |
| Crystallization Heat | 40.0 J/g | ASTM D3418 |
| Heat of Fusion | 42.0 J/g | ASTM D3418 |
| Thermal Stability - 1% mass loss, N2 | 405 °C | TGA |
| Electrical | Typical Value Unit | Test method |
| Volume Resistivity ³ (23°C) | 5.5E+16 ohms·cm | ASTM D257 |
| Dielectric Strength (23°C, 3.20 mm) | 14 kV/mm | ASTM D149 |
| Dielectric Constant (23°C, 1 MHz) | 2.57 | ASTM D150 |
| Flammability | Typical Value Unit | Test method |
| Flame Rating | V-0 | UL 94 |
| Oxygen Index | 52 % | ASTM D2863 |

Additional Information

Storage and Handling

 Halar® melt processable fluoropolymer resins can be stored without shelf life issues when kept in a clean and dry area at ambient temperatures. Opened containers should be tightly resealed to prevent any contamination.

Notes

Typical properties: these are not to be construed as specifications.

- ¹ 50 mm/min
- ² 2.5 mm/min
- ³ 50% RH

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