

Product Description

Flame Retardant 10% Glass Filled Polycarbonate

Special Characteristics

- UL94 5VA & V-0 10%GF FR PC w/ sustainable feedstreams, Suitable for Structural Foam Molding
- UL Yellow Card File number E175765

General Properties

| | |
|--------------------|--------------------------------------|
| Appearance | Black |
| Processing Methods | Injection Molding, Profile Extrusion |
| Applications | Electrical / Electronic Applications |

Mechanical Properties

| | Test Method | English Units | | S.I. Units | |
|-----------------------------|-------------|---------------|----------|------------|-----|
| Tensile Strength @ Yield | ASTM D638 | 8,000 | psi | 55 | MPa |
| Tensile Strength @ Break | ASTM D638 | 6,500 | psi | 45 | MPa |
| Tensile Elongation at Break | ASTM D638 | 15 | % | 15 | % |
| Flexural Modulus | ASTM D790 | 450,000 | psi | 3,103 | MPa |
| Flexural Strength | ASTM D790 | 7,500 | psi | 52 | MPa |
| Notched Izod Impact (73°F) | ASTM D256 | 2.5 | ft-lb/in | 134 | J/m |

Physical Properties

| | Test Method | English Units | | S.I. Units | |
|--|-------------|---------------|---------|---------------|---------|
| Specific Gravity | ASTM D792 | 1.25 | sp gr | 1.25 | sp gr |
| Melt Flow n/a | ASTM D1238 | n/a | g/10min | n/a | g/10min |
| Mold Shrink - Flow: 0.126 in (3.20 mm) | ASTM D955 | .002-.004 | in/in | 0.127 - 0.178 | mm/mm |
| Filler Content | | 10.0 | % | 10.0 | % |
| Flame Rating 0.125 | UL 94 | 5VA | | 5VA | |
| Flame Rating 0.062 | UL 94 | V-0 | | V-0 | |
| Water Absorption | ASTM D570 | 0.12 | % | 0.12 | % |

Thermal Properties

| | Test Method | English Units | | S.I. Units | |
|---------------------------------------|-------------|---------------|----|------------|----|
| Heat Deflection Temperature @ 66 psi | ASTM D648 | 296 | °F | 147 | °C |
| Heat Deflection Temperature @ 264 psi | ASTM D648 | 290 | °F | 143 | °C |

Injection Molding

| | Value | |
|--------------------------------|----------------------|-----|
| Drying Temperature | 200 to 250 °F | °F |
| Drying Time | 4.0 hr | hrs |
| Maximum Drying Time | 7.0 hr | hrs |
| Suggested Maximum Moisture | 0.020% | % |
| Suggested Shot Size | 40 to 75 % | % |
| Rear Barrel Temperatures | 550 to 590 °F | °F |
| Middle Barrel Temperatures | 570 to 610 °F | °F |
| Front Barrel Temperatures | 590 to 630 °F | °F |
| Nozzle Temperature | 580 to 620 °F | °F |
| Melt (processing) Temperatures | 590 to 630 °F | °F |
| Mold Temperatures | 180 to 240 °F | °F |
| Back Pressure | 50 to 100 psi | psi |
| Screw speed | 25 to 75 rpm | rpm |
| Vent Depth | 0.0015 to 0.0030 inc | in |

These Data Sheet Values are Typical Values and are not intended for specification purposes. These values should only be used as a guide and no assurances by EnCom, Inc. can be granted that all molded articles will exhibit duplicate properties as those listed above. Each material user should perform their own testing for suitability.