## Processing Conditions

## Polycarbonate/Acrylic Alloy (PC/PMMA) — RTP 1800A Series EMI Shielding Compounds

| Typical Injection Molding Conditions | English | SI Metric |
| :---: | :---: | :---: |
| Temperatures |  |  |
| Rear zone | 460-480 ${ }^{\circ} \mathrm{F}$ | 238-249 ${ }^{\circ} \mathrm{C}$ |
| Center zone | 445-485 ${ }^{\circ} \mathrm{F}$ | 229-252 ${ }^{\circ} \mathrm{C}$ |
| Front zone | 395-445 ${ }^{\circ} \mathrm{F}$ | 202-229 ${ }^{\circ} \mathrm{C}$ |
| Melt | 460-510 ${ }^{\circ} \mathrm{F}$ | 238-266 ${ }^{\circ} \mathrm{C}$ |
| Mold | 90-150 ${ }^{\circ} \mathrm{F}$ | 32-66 ${ }^{\circ} \mathrm{C}$ |
| Pressures |  |  |
| Injection | 8000-12000 psi | 55-83 MPa |
| Hold | 5000-10000 psi | 34-69 MPa |
| Back | 50-100 psi | 0.34-0.69 MPa |
| Speeds |  |  |
| Fill | 1-2 in/sec | 25-51 mm/sec |
| Screw | 30-60 rpm | 30-60 rpm |
| Drying |  |  |
| Time \& Temperature | 3 to 4 Hrs @ $180{ }^{\circ} \mathrm{F}$ | 3 to 4 Hrs @ $82{ }^{\circ} \mathrm{C}$ |
| Dew Point | $0.0{ }^{\circ} \mathrm{F}$ | $-18{ }^{\circ} \mathrm{C}$ |
| Moisture Content | 0.02 \% | 0.02 \% |

## Notes

- Remove hopper magnets
- Uses a reverse barrel profile
- Allow 4 to 5 shots to properly disperse the conductive fibers. The surface finish should have slight silver streaks (not clumps), indicating proper fiber dispersion.
- This information is intended to be used only as a guideline for designers and processors of modified thermoplastics for injection molding. Because injection mold design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.
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