



## Processing Conditions

### Polystyrene (PS) — RTP 400 Series EMI Shielding Compounds

#### Typical Injection Molding Conditions

	English	SI Metric
<b>Temperatures</b>		
Rear zone	430 - 460 °F	221 - 238 °C
Center zone	420 - 450 °F	216 - 232 °C
Front zone	410 - 440 °F	210 - 227 °C
Melt	400 - 475 °F	204 - 246 °C
Mold	150 - 180 °F	66 - 82 °C

<b>Pressures</b>		
Injection	10000 - 15000 psi	69 - 103 MPa
Hold	5000 - 10000 psi	34 - 69 MPa
Back	50 - 100 psi	0.34 - 0.69 MPa

<b>Speeds</b>		
Fill	1 - 2 in/sec	25 - 51 mm/sec
Screw	30 - 60 rpm	30 - 60 rpm

<b>Drying</b>		
Time & Temperature	2 Hrs @ 180 °F	2 Hrs @ 82 °C
Dew Point	n/a °F	n/a °C
Moisture Content	n/a %	n/a %

#### 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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