

Processing Conditions

High Density Polyethylene (HDPE) — RTP 700 Series PermaStat Compounds

Typical Injection Molding Conditions	English	SI Metric
Temperatures		

Temperatures		
Rear zone	320 - 370 °F	160 - 188 ℃
Center zone	330 - 380 °F	166 - 193 ℃
Front zone	340 - 390 °F	171 - 199 ℃
Melt	350 - 400 °F	177 - 204 ℃
Mold	70 - 125 ℉	21 - 52 ℃

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

Speeds		
Fill	0.5 - 1 in/sec	13 - 25 mm/sec
Screw	60 - 90 rpm	60 - 90 rpm

Drying		
Time & Temperature	2 Hrs @ 175 ℉	2 Hrs @ 79 ℃
Dew Point	n/a ℉	n/a ℃
Moisture Content	n/a %	n/a %

Notes

- 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.
- No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.

RTP Company • 580 East Front Street • Winona, MN 59987 • 507-454-6900