



Processing Setup Sheet for Injection Molding Process

Injection Molding Parameter	Units	Typical Setting
Melt Temperature	°F	450 - 460
Nozzle	°F	440 - 450
Adapter	°F	450 - 460
Front	°F	450 - 470
Middle	°F	440 - 460
Rear	°F	430 - 450
Hot Runner/Manifold Temperature	°F	380-420
First or Boost Stage Injection:		
Time	sec	5-10 (less for smaller parts)
Pressure	psi	1,200-2,000 (max)
Fill Speed:		
First 10% of Shot	in/sec	1.5
Next 70% of Shot	in/sec	2.3
Last 20% of Shot	in/sec	1.2
Packing Stage Time	sec	4-8
Second or Hold Stage Injection:		
Time (with a packing stage)	sec	6-11
Time (without a packing stage)	sec	9-15
Pressure	psi	60% of max. inj. Pressure
Cushion	in	0.25 – 0.50 (dependent on shot size)
Screw Speed	rpm	60-100
Back Pressure	psi	50-200
Mold Temperature	°F	70-120 (actual surface pyrometer reading)
Clamp Pressure	tons/in ²	2.2(a)
Drying Conditions		usually not required
Purging		Polyethylene (PE), polypropylene (PP) or standard purging compound

(a) 2.2 tons/in² of projected mold area. This is dependent on wall thickness, flow distance and flow direction changes.

Before using this product, the user is advised and cautioned to make his/her own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Phillips 66 does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reverence to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.

COPYLENE™ is a trademark of Phillips 66 Company
 Visit us on the Web @ www.COPYLENE.com