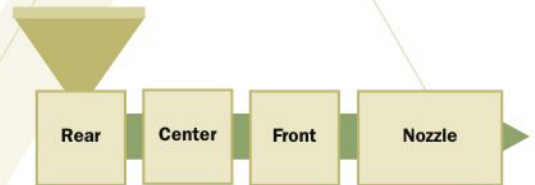


reSoundSM Biopolymer Compounds
1200 Series

Injection Molding Parameters

The barrel temperatures below should be used as a reference point. Actual melt temperatures should be measured using a pyrometer to ensure consistent and accurate processing.



BARREL TEMPERATURES:		
Zone 1 - Rear	400° - 450° F	<ul style="list-style-type: none"> - Gate design and runner type will affect the melt temperature required. - Excessively high temperature can cause reduction in the intrinsic viscosity of the compound.
Zone 2 - Center	410° - 460° F	
Zone 3 - Front	420° - 470° F	
Nozzle	430° - 480° F	
Melt Temperature	440° - 490° F	
INJECTION PARAMETERS:		
Velocity	1 - 3 in./ sec	<ul style="list-style-type: none"> - Lower initial injection speed will minimize gate blush. - Utilize injection pressure needed to fully fill geometry.
Pressure	1,500 psi (hyd)	
SCREW RECOVERY PARAMETERS:		
Back Pressure	50 - 150 psi (hyd)	<ul style="list-style-type: none"> - Use low back pressure and screw RPM for consistent recovery and minimize shear.
Screw Speed	75 - 125 rpm	
ADDITIONAL PARAMETERS:		
Mold Temperature	130° - 180° F	<ul style="list-style-type: none"> - Recommended mold temperature is required for better surface finish and releasing molded in stress. - Drying is required to minimize void and part-to-part consistency.
Drying Conditions	6 - 8 hrs @ 160° F	
Moisture Level	0.02% or lower	

Tooling: Hardened tool steel recommended (30 - 32 Rockwell C)
Screw Compression Ratio: 3.0 to 1.0
L/D Ratio: 18:1 to 20:1
General Purpose screw works well
Wear: Generally around gate. Inserts recommended for large-volume production.

reSound Biopolymer Compounds combine compatible engineering thermoplastic resins with bio-based polymers to achieve a minimum level of 30% bio-based content and are classified as a PolyOne Sustainable Solution*
To learn more go to www.polyone.com/sustain

*The PolyOne Sustainable Solution certification is awarded to those products or services that meet defined criteria for sustainability in areas such as renew-ability, recycle-ability, reusability, eco-friendly composition, or resource efficiency.



SPECIALTY ENGINEERED MATERIALS

Manufacturing	Sales/Service	Manufacturing and Sales/Service	PolyOne Regional Headquarters
●	■	+	☆

Product choices often vary by region due to differences in regulatory and agency requirements, availability and other key factors. Please contact your nearest sales office for assistance in choosing the right solution for your locale.

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