



ZEON CORPORATION

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Report No. C1113EV1

Injection Blow molding condition of ZEONOR® 1420R

1. Typical Molding Condition

- Mold / Tool 100ml bottle 6 cavity mold
- Molding Machine 3 Station Injection Stretching Blow Molding Machine
SB 3-250 [Aoki Technical Laboratory, Inc](#)
- Screw diameter 54mm
- Molding Condition

Cylinder temperature	Nozzle	290 °C	554 °F
	Zone 1 (Front)	290 °C	554 °F
	Zone 2 (Middle)	287 °C	549 °F
	Zone 3 (Rear)	284 °C	543 °F
	Throat (under Hopper)	Water cooling, N2 purge	
Hot runner temperature		270 ~ 290 °C	518 ~ 554 °F
Mold temperature	Injection mold (Core side)	115 °C	239 °F
	Injection mold Cavity side	125 °C	257 °F
	Blow mold	100 °C	212 °F
Injection time		10 seconds	
Cooling time		12 seconds	
Blowing time		14 seconds	
Cycle time		37 seconds	
Stretching ration (lengthwise)		1.1 times	

2. Preparation

- **Predrying;** Air (Oxygen) dissolved in ZEONOR pellets can cause discoloration, carbide and void, ZEONOR should be dried (heated) to remove air in the pellets for 4 to 12 hours at 100°C to 105°C (212°F to 221°F) before molding. Drying too long period may cause heat deterioration and possibly discoloration in the molded articles.
- **Nitrogen purge;** Nitrogen purge is recommended in barrel throat while molding to avoid oxidative degradation!!!

Please refer to ZEONOR Injection Molding Guide for more details.

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