



# ZEON CORPORATION

## SPECIALTY PLASTICS DIVISION

1-6-2 Marunouchi, Chiyoda-ku TOKYO, 100-8246 JAPAN

Phone: +81-3-3216-1769

FAX: +81-3-3216-2334

Report No. D1013EV1

## Injection Blow molding condition of ZEONEX® 690R

### 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 ZEONEX pellets can cause discoloration, carbide and void, ZEONEX 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 ZEONEX Injection Molding Guide for more details.

The test results herein are believed to be accurate but are laboratory tests based on limited sampling, which do not necessarily simulate actual use conditions. NO REPRESENTATIONS, GUARANTEES OR WARRANTIES OF ANY KIND ARE MADE AND ZEON SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ZEON shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond ZEON's direct control.

A corporate brand "ZEON", a logotype "Z", "ZEONEX", and "ZEONOR" are the registered trademarks of ZEON CORPORATION.