



ZEON CORPORATION

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Report No. MoldingGuideZNR1000Series (Quick Guidelines)

ZEONOR®1020R and 1060R Injection Molding Conditions (Quick Guidelines)

Pre-Drying (Heating):

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 70°C to 80°C (158°F to 176°F) before molding. Drying for too long may cause heat deterioration and possibly discoloration in the molded articles.

Recommended purging cycle:

- (1) Pull the screw out of the barrel and clean the screw; check ring and barrel.
- (2) Purge with ZEONOR at 250°C/482°F for 10 injections, then at 290°C/554°F for 10 injections. This cycle can be modified per the application. It has been found that less material is wasted because of contamination by following this cycle than by using other purging methods.

Typical molding conditions for ZEONOR 1020R :

Mold	Nozzle	Zone 1*	Zone 2	Zone 3	Throat**
70 -95°C	250°C	260°C	250°C	235°C	220°C
158-203°F	482°F	500°F	482°F	455°F	428°F

Typical molding conditions for ZEONOR 1060R :

Mold	Nozzle	Zone 1*	Zone 2	Zone 3	Throat**
70 -95°C	240°C	250°C	240°C	225°C	210°C
158-203°F	464°F	482°F	464°F	437°F	410°F

* Remark: Zone 1 can be adjusted between 220 - 290°C (428 -590°F) depending on the part.

** Remark: Set the temperature under the hopper at 40 – 80°C (104-176°F), if it can be controlled.

Injection speed, Holding pressure, Screw speed etc:

	Injection & Holding pressure	Injection speed	Screw speed	Back pressure	Suckback position
Small size	40~60Mpa	30~80 cm ³ /sec.	20~80 r.p.m.	4 ~10 MPa	1~3 mm
Large size	50~150MPa				
Small size	5800~8700 psi			580~1450 psi	0.04~0.12 inch
Large size	7200~22000 psi				

Nitrogen purging:

Nitrogen purge is recommended in barrel throat while molding to avoid oxidative degradation!!!
Please refer to ZEONOR Injection Molding Guide for more details.

For technical support, please contact :

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