

ZEONEX[®] RS420-LDS

Injection Molding Guide

Molding Guide

Date Issued: Feb 2015

ZEONEX RS420-LDS can be processed using standard molding practices with conventional injection molding equipment. The following molding guidelines are typical mid-point ranges for the material when processing with 80-120t class machine.

Contact ZEON for more detailed information regarding processing, material flow characterization, or design considerations for ZEONEX RS420-LDS.

ZEONEX RS420-LDS	
Resin Preheat	4-12hr, 105°C
Mold Temperature	90-110°C
Barrel Temperatures	
Nozzle	240-290°C
Meter	270-300°C
Melt	240-280°C
Feed	60-80°C
Melt Temperature	240-290°C
Injection Speed	30-80cm ³ /s
Screw Speed	20-40rpm
Back Pressure	50-100kgf/cm ²
Typical Mold Shrink	0.4-0.8%
Pack Pressure:	
It is recommended to use the minimal amount of pack pressure required to obtain correct part dimension. High pack pressure should be avoided in order to reduce mold stress and optical birefringence.	
Nitrogen Sealing:	
Nitrogen sealing at the injection feed throat is recommended to reduce chance of degradation during long residence time processes and to maintain the high optical qualities of COP.	
Purge Recommendation:	
Conventional olefin-type purge materials are suitable for use with COP. In order to minimize the chance for contamination, ZEON recommends to mechanically clean the screw and barrel components prior to molding COP.	
Tooling Consideration:	
COP resin has an affinity to chrome and nitriding steel coatings; use of these materials on barrel, screw, or mold components should be avoided to reduce chance of resin or part sticking.	

Contact ZEON for more detailed information regarding processing, material flow characterization, or design considerations.

ZEON | www.zeonex.com | zeonex@zeonchemicals.com | +1.502.775.2000 (USA) | +49.211.52.67.0 (EU) | +81.3.3216.1769 (Asia)



The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained there from. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. ZEON CHEMICALS L.P. shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond the direct control of ZEON CHEMICALS L.P. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.