

Georgia Gulf Rigid PVC Compounds Injection Molding Processing Guide

To process most Georgia Gulf Rigid PVC injection molding compounds you must achieve a 395 to 410°F melt temperature. This should be obtained using a combination of screw shear heat and barrel heat.

Barrel heats should be set with a graduating heat profile; cooler at the hopper zone (to allow volatiles to escape) ramping upward to the metering zone and nozzle.

Ex. Zone-1 (320-340°F)
Zone-2 (330-350°F)
Zone-3 (340-360°F)
Nozzle (340-350°F)

Back Pressure should be set at 50 to 150 PSI.

Screw rotation should be slow, or just fast enough to finish filling the shot approximately 2 seconds before mold opening.

Mold cooling temperature should be between 60-120°F.

Injection speed should start out at ~25% of maximum and gradually speed up to between 50% & 75%. Injection pressures can run between 12,000 and 20,000 PSI. To reduce the likelihood of sink marks, the use of holding pressure is recommended and should be set at approximately ½ the injection pressure to avoid over packing of the part. Hold pressure time should be between 2 and 4 seconds or just enough time for the gates to freeze off.

If you need further assistance processing Georgia Gulf compounds, we urge you to contact our Technical Services Department at (601) 206-3211.