# INJECTION MOLDING



# **Chemical Purging Instructions**

Concentrate grades must be mixed with a carrier resin prior to use – Please see Chemical Mixing Instructions

## Preparation

- Run machine to empty all production material.
- Clean hopper and screw inlet of residual material.
- If vented barrels, cap vents for maximum effectiveness. Clean vent throat of resident material.
- If possible, push hopper aside to get direct access to the throat. If not, RapidPurge can be fed via hopper magnet drawers or hopper itself.
- Move barrel away from mold.



Pre-flush system with natural material to minimize resident material/color prior to purging. Empty system again.



If challenging degradation exists, raise temperature (25 degrees or more) on metering zone and nozzle for added chemical reaction and maximum cleaning results.

Never exceed maximum temperature of resident resin.

#### Temperature Sensitive Materials

If purging temperature sensitive materials like PVC, POLYACETALS, ABS, or Flame Retardant resin, please see page 2 before proceeding.

# **Purging**

- Feed RapidPurge directly into the throat. Keep screw at normal production RPM until RapidPurge is observed coming out of the nozzle.
  - If HIGH TEMPERATURE purging starve feed RapidPurge to prevent bridging /collaring at the feed zone.
  - If vented-barrel systems, vary screw RPM as RapidPurge is being run through to change velocity through the decompression zone.
- Continue adding RapidPurge as required until resident material/color removed



For maximum effectiveness, add a 10-15 minute soak cycle with the screw stopped in the forward position. Assure the nozzle remains filled with RapidPurge during the soak and keep the throat filled with fresh RapidPurge. If the drool stops, the screw should be turned on briefly to replace the exiting RapidPurge.



Be sure the nozzle temperature doesn't drop below the metering zone temperature.

# Post-purge

- Empty system until all visible traces of RapidPurge are removed.
- Clean feed areas of RapidPurge to avoid contamination.
- Reset temperatures if raised for the purge.
- Follow with production material until all traces of RapidPurge are removed.

<b>√</b> Tip	Varying screw speed while running new production material may help to clear RapidPurge
	from system more quickly.

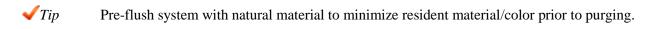
- √ Tip If switching to material of decreased viscosity, bridging down may be required to assure removal of purge residue. Varying screw speed can also be helpful.
- ✓ Tip RapidPurge chemical compounds are excellent for shutdowns.

  Simply empty the machine after the purge, leaving residual RapidPurge in the system with heats turned off. At start-up, bring equipment up to operating temperature and introduce production material to remove residual RapidPurge.

## **Temperature Sensitive Material**

If purging temperature sensitive materials like PVC\*, POLYACETALS, ABS, or Flame Retardant resin, two purges may be required. It is also suggested to run some natural PE/PP prior to the purge.

- The first purge MUST be performed at normal operating temperatures to remove the temperature sensitive material.
- If carbon deposits are still present after the first purge, a second purge can be performed at higher temperatures.



#### \*PVC

If purging PVC with our standard chemical grades - PM9240, PM5540, PM8240, IG3000

• It is required to PRE-FLUSH system with natural PE/PP prior to introducing RapidPurge.

If purging PVC at low temperatures - below 380°F,

- Increase temperatures, except feed throat, to 380°F for the first purge.
- If carbon deposits are still present after the first purge, Raise the heats on the nozzle and front zone and purge again

If following RapidPurge with PVC or other temperature sensitive materials,

• Let machine cool back to operating temperatures before introducing the next resin, or use polyethylene as a temperature bridging material.

#### Questions/Comments? Contact us at 800-243-4203 or <a href="mailto:info@rapidpurge.com">info@rapidpurge.com</a>