



Mechanical Purging Instructions

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

Preparation

- Run machine to empty all production material.
- Clean hopper and screw inlet of residual 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.

✓ Important

If purging Injection HOT RUNNER system, the screw & barrel is purged separately from the Hot Runner/Manifold. Purge screw & barrel with the following instructions then See page 2 to purge Hot Runner system

✓ Important

If purging Injection BLOW MOLDING system, purge the screw & barrel only with the following instructions. Contact our Technical Support department for information on purging the manifold.

Purging Screw & Barrel

- Feed RapidPurge directly into the throat at operating temperatures. Keep screw at normal production RPM until RapidPurge is observed coming out of 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

✓ Tip

Varying screw speed as RapidPurge is being run through will maximize scrubbing action and agitation inside the barrel.

Temperature Sensitive Materials

If purging temperature sensitive materials like PVC, POLYACETALS, ABS, or Flame Retardant resin, temperatures can be kept at normal operating temperatures. If purging PVC below 380°F and purge is sluggish, increase temperatures, except feed throat, to 360-380°F to allow HDPE carrier to flow better.

Post-Purge

- Empty system until all visible traces of RapidPurge are removed.
 - If cleaning HOT RUNNER - See page 2 to purge Hot Runner.
- Clean feed areas of RapidPurge to avoid contamination.
- Follow with production material until all traces of RapidPurge are removed.

✓ 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.



Tip

RapidPurge Mechanical compounds are not recommended for shutdown.

Purging Hot Runner

Pre-mix grades cannot be used on molds with gate size less than .008 in (0.203mm)
Concentrates cannot be used on molds with gate sized less than .035 in (.889 mm)

After screw and barrel are cleaned, there are two methods of Hot Runner/Manifold Purging:

- **OPEN MOLD PURGE** - Feed RapidPurge directly into the throat. Keep screw at normal production RPM until RapidPurge is observed coming out of the open mold gates. We recommend using a splash guard to protect adjacent mold half from residue. Inspect purgings and continue adding RapidPurge as required until resident material has been visually removed. Varying screw speed may help to clear resident color/material.
- **CLOSED MOLD PURGE / PARTIAL SHOT** - Feed RapidPurge directly into the throat. Keep screw at normal production RPM and empty the screw and barrel by taking partial shots to make RapidPurge slugs. Remove RapidPurge slugs and repeat the partial shot sequence until all traces of resident color/material is gone. Cycle machine until empty.



Tip

Raise heat on the mold and around gates (25 degrees or more) to soften the buildup of material.

Post-Purge Hot Runner

Empty system until all visible traces of RapidPurge are removed.
Clean feed areas of RapidPurge to avoid contamination.

Set metering zone and nozzle back to normal temperatures.

While elevated mold temperatures are returning to normal, follow with production material until all traces of RapidPurge are removed.



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.



Tip

RapidPurge Mechanical compounds are not recommended for shutdown.

Questions/Comments? Contact us at 800-243-4203 or info@rapidpurge.com

These instructions are provided as general guidelines only. Your application, material, and/or process may have unique requirements. Please feel free to contact our Technical Services department at any time so that we may assist you in achieving maximum purge results with our RapidPurge products.