



ASACLEAN® PLUS GRADE INJECTION MOLDING HOT RUNNER PURGING INSTRUCTIONS

For Resins 175°C – 360°C (345°F – 680°F)

- 1. Empty the system of the production resin, and make sure the feed areas are clean.
- Increase the nozzle and front zone heats around 30°C (50°F), if safe and within recommended resin processing range. Increase manifold heats to the maximum temperature allowable for the mold, to promote cleaning. Keep feed throat temperature below 120°C (250°F).

If purging a heat sensitive resin, do not exceed the safe processing temperature of the material. This purge procedure may need to be repeated at elevated temperatures to remove all contamination.

3. Raise the mold and probe heats to the maximum temperature allowable for the mold. If permissible, shut off cooling water to the hot half of the mold. Melting the built-up layers of polymers will require intense heat.

It is recommended that the mold manufacturer be consulted to determine the maximum allowable temperature, and whether shutting off cooling water is permissible.

*PLEASE NOTE: Do not feed only Asaclean[®] PLUS in barrel. It is designed to be used as a mixture with production resin and not by itself in the barrel. For closed molds, <u>consult with an Asaclean[®] Purging Expert</u>.

- 4. Flush the machine and hot runner by shooting 5-10 shots with clean, natural polyethylene that is at least as stiff as the production resin to remove most of the residual production resin. Retract the screw and barrel and purge the remaining material.
- 5. There are two options to add Asaclean® PLUS to the system
 - a. Blend Asaclean[®] PLUS at prescribed ratio (10-20%) with your next production resin or a low melt injection grade HDPE and feed through hopper.
 - b. Asaclean[®] PLUS at prescribed let down ratio and mix with production resin through color hopper/additive hopper or a gravimetric feeder.
- 6. With the barrel now empty and the screw in the forward position, add Asaclean[®] PLUS by rotating the screw until the purge begins to extrude from the nozzle.
- 7. Stop the screw and allow the contents of the barrel to sit for a 10 20-minute heat soak. Asaclean[®] PLUS is heatactivated, so expansion will occur during the heat soak. If nozzle drool stops, jog the screw until it begins again.
- 8. Displace the Asaclean[®] PLUS and production resin blend from the screw and barrel. If the last of the purge is heavily contaminated, elevate nozzle temperatures an additional 55°C (100°F), and repeat steps 5-7.
- 9. When screw is clean, move the screw and barrel forward and load the system with Asaclean[®] PLUS by shooting parts (4-6 shots should be plenty).
- 10. Soak the mold 10 minutes with PLUS. All cavities should be full, with the mold clamped, screw stopped and the nozzle in the forward position. (Closed mold purge is possible when mixing PLUS with PP and PE, for other resins do open mold.
- 11. Empty the system by shooting parts. If the last parts still show contamination, repeat steps 8-10.
- 12. Change nozzle, barrel, and hot runner temperatures for next resin. Displace the Asaclean[®] PLUS with the next resin.
- 13. Begin production under normal processing conditions.

Do not allow ASACLEAN PLUS grade to be left idle in barrel for more than 30 minutes at temperatures higher than 300 °C (570 °F).

Please read our Safety Data Sheet (SDS) before using Asaclean.

Technical Questions? Contact Asahi Kasei Asaclean Americas, Inc.

Call (800) 787-4348 / (973)257-1999, email sales@asaclean.com or visit www.Asaclean.com