### ASACLEAN<sup>TM</sup> NCR GRADE INJECTION MOLDING HOT RUNNER PURGING INSTRUCTIONS For Resins 175°C – 360°C (350°F – 680°F)

- 1. Empty the system of the production resin, and make sure the feed areas are clean.
- 2. 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.

- 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. With the barrel now empty and the screw in the forward position, add Asaclean NCR by rotating the screw until the purge begins to extrude from the nozzle.
- 6. Stop the screw and allow the contents of the barrel to sit for a 10 20-minute heat soak. Asaclean NCR is heat activated, so expansion will occur during the heat soak. If nozzle drool stops, jog the screw until it begins again.
- 7. Purge the Asaclean NCR material 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.
- 8. When screw is clean, move the screw and barrel forward and load the system with Asaclean NCR by shooting parts (4-6 shots should be plenty).
- 9. Soak the mold 10 minutes with NCR. All cavities should be full, with the mold clamped, screw stopped and the nozzle in the forward position.
- 10. Empty the system by shooting parts. If the last parts still show contamination, repeat steps 8-10.
- 11. Change nozzle, barrel, and hot runner temperatures for next resin. Displace the Asaclean NCR with the next resin.
- 12. Begin production under normal processing conditions.

#### **Technical Questions?**

## To request detailed technical bulletins or technical support, contact us at Asahi Kasei Asaclean Americas Inc.

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