



## FRESH START PURGING SOLUTION™ GP-HH Hybrid

### PRODUCT INFORMATION SHEET

Fresh Start Purging Solution™ GP-HH Hybrid is a patented, revolutionary, all-purpose purging compound which is intended to cover the needs of the plastic industry.

Fresh Start Purging Solution™ GP-HH Hybrid is one in a series of innovative and groundbreaking purges designed for the removal of unwanted pigments, polymers and contaminants without leaving residue. Fresh Start Purging Solution™ GP-HH Hybrid is a mechanical/chemical purging solution which addresses those applications which require this type of purging compound.

<b>Applications:</b>	<b>Injection:</b> Hot and Cold Runners / Blow Molding <b>Extrusion:</b> Profile / Sheet / Cast Film / Compounding / Blow Film
<b>Process Temperature Range:</b>	350°F – 625°F (177°C – 329°C)
<b>Resin Types:</b>	<b>All types - except acetals (Delrin™, POM) refer to note below*</b>
<b>Minimum Clearance:</b>	0.010 inch or 254µm (microns)
<b>Amount of Purge:</b>	Generally requiring 1 to 3 times the barrel capacity depending on the machines condition

Samples are available for evaluation.

Fresh Start Purging Solution™ series of compounds are produced in Ohio, USA and Ontario, Canada.

Fresh Start Purging Solution™ is a trademark of Fresh Start Polymer Solutions Inc.

Delrin™ is a trademark E.I. du Pont de Nemours

**\*Note: Acetal materials are not compatible with Fresh Start Purging Solution GP-Hybrid™. Fresh Start Purging Solution MC-2™ is recommended for this purpose.**

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### INJECTION MOLDING CLEANING PROCEDURE

Fresh Start Purging Solution™ GP-HH Hybrid is a patented, revolutionary, all-purpose purging compound which is intended to cover the needs of the plastic industry.

1. Please ensure that the **SDS** and Product information sheets are read and understood.  
  
**Always** wear safety protection when running machines with purging compounds as per the workplace safety of your company.
2. Arrange all supplies at the beginning and near at hand to facilitate a quick and efficient cleaning.
3. Check that the temperatures are between 350 -575°F.
4. Ensure the hopper, magnet box, receiver filter and drain tube are empty and cleaned.
  - Vacuum and wipe down the hopper, feed throat and receiver filter
  - Ensure it's completely clean and free of any potential contamination
5. Back off the barrel from the manifold.
6. Increase back pressure to maximum safe level and empty the barrel of material before introducing purging compound.
7. Fill the hopper with at least of one barrel full of Fresh Start purging compound.
  - Generally, 1-2-barrel capacity of purging compound are required to clean the barrel and screw
  - Depending on the type of resin, pigment type, difficulty of the application and condition of the equipment, additional purging compound maybe required.
8. With the screw forward and the check ring open, slowly start advancing the purge through the barrel while maintaining maximum back pressure.
9. Once the purge is seen coming out the nozzle, stop and let the material soak in the barrel for minimum of 90 seconds.
10. Increase the screw speed to the maximum safe level and purge to remove contaminates.



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11. As the purge starts to look clean, drop the screw speed normal and back pressure to about 10 -20%. Retract the screw, then perform high speed, short shots ( between 10-20% of the barrel capacity) allow for a reciprocating [back and forth] motion of the screw for a minimum of 5 shots. This action will facilitate the cleaning the area around the check ring and end of screw.
12. Visually inspect the extrudate for contaminates. If contamination is found go to back step 7 and load another barrel capacity of purge and repeat steps 8-11
13. Should no contamination be identified, proceed to the next step for cleaning manifold or skip and proceed to step 13.
14. Procedure for manifold purging: Purging through the manifold will require 1 to 2 barrels full of purging compound depending on the size of part, pigment type etc.
  - Verify the barrel is clean (as per the previous steps)
  - Advance the nozzle forward into the manifold.
  - If there are valve gates, ensure that they are in the open position.
  - Perform quick, shots of purge through the manifold while inspecting for contamination
  - If possible, it is preferential to mold parts with the purge to aid in the cleaning of the manifold. The additional pressure, developed in molding, will aid in the removal of contamination.
15. Once the last of the purge has been added, the system is clean and the screw is visible in the throat of the machine, simply introduce the next material to be used into the barrel. Continue to run that material through the system until the purging compound is completely gone and the new material is coming out clean. At this point, the machine is ready to run. Wherever possible, molding of parts will help facilitate the transition.
16. Please note that Fresh Start Purging Solution™ GP-HH Hybrid is not designed to remain in the barrel. If there are no plans to continue running and shutting down, clear the purge compound from the extruder and fill the screw and barrel with enough Fresh Start Purging Solution® MC2-HH or Weekender™ or heat stabilizer Polypropylene to create an airtight plug to prevent oxidation.

**Note: Acetal materials are not compatible with Fresh Start Purging Solutions® GP-Hybrid. Don't mix Acetal and Fresh Start Purging Solutions® GP-HH Hybrid in an extruder. Fresh Start Purging Solutions® MC2-HH is recommended for this purpose.**

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