



## FRESH START PURGING SOLUTIONS® MC2-HH™

### PRODUCT INFORMATION SHEET

Fresh Start Purging Solution MC2-HH™ is a patented, revolutionary, all-purpose purging compound which is intended to cover the needs of the plastic industry.

Fresh Start Purging Solution MC2-HH™ 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 MC-2™ is a mechanical purging solution which addresses those applications when a hybrid, or chemical purge, are not preferred.

<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</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 machine's 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.

Celcon® and Hostaform® are trademarks of Celanese

Delrin® is a trademark of DuPont

Note:

Fresh Start Purging Solution® MC2-HH is safe for use in purging acetal homo / copolymer resins (Delrin® / Celcon® / Hostaform® and other POM).

*Important! The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true to the best of our knowledge. NO WARRANTY OR GUARANTY, EXPRESS OR IMPLIED, IS MADE REGARDING PERFORMANCE, SUITABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling or storage. Other factors may involve other, or additional, safety or performance considerations. While our technical personnel can respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any Federal, State or local laws.*



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### OLEFINIC PURGE PROCEDURE FOR EXTRUSION

Fresh Start Purging Solutions® MC2-HH™ 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°F – 625°F (177°C – 329°C). **Should the polymers allow it, reduce the temperature region is between 180°C [356°F] -220°C [428°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. Empty the barrel of the current material before introducing purging compound.
6. Remove screen packs
7. If the extruder is vented, it is suggested that vent plugs or caps from the machine manufacturer be installed. [Closing the vents, helps maintain higher pressure throughout the extruder and achieve more effective agitation of the purge, facilitating the removal of contamination]

**Note:** It's important to keep an eye on and operate the extruder within the safe guidelines of the pressure gauges and safe screw speeds for the given conditions.

8. Fill the hopper with at least of one barrel full of Fresh Start Purging Solution MC2-HH 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.
9. At a low speed, advance the purge through the barrel, ensuring that the screw and barrel are



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completed filled.

10. Once the purge is seen coming out the nozzle, increase the screw speed to 90% of the maximum safe level and hold for sixty (60) seconds.
11. After that time, stop the extruder. Then increase the screw speed to the 30% of maximum screw speed and hold for sixty (60) seconds.
12. After that time, stop the extruder. Then increase the screw speed to the 50% of maximum screw speed and hold for sixty (60) seconds.
13. After that time, stop the extruder. Then increase the screw speed to the 15% of maximum screw speed and hold for sixty (60) seconds.
14. After that time, stop the extruder. Then increase the screw speed to the 70% of maximum screw speed and hold for sixty (60) seconds.
15. After that time, stop the extruder. Then increase the screw speed to the 15-20% of maximum screw speed and hold for 6-10 minutes.
16. Visually inspect the extrudate (purge pile) for contaminates
  - If contamination is found go to back step 10 and load another barrel capacity of purge and repeat steps 10-15
  - Should no contamination be identified, proceed to the next step 17.
17. Once the last of the purge has been added, the system is clean and the screw is visible in the throat of the machine, 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.
18. Please note that Fresh Start Purging Solution™ MC2-HH is designed for shutdowns. If there are no plans to continue running and shutting down, clean the equipment first before powering down with Fresh Start Purging Solution® MC2-HH. Once clean, 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. Additional information is available on request.

Note: The key to extrusion purging is obtaining disruption in the flow patterns and establishing different velocities and shear rates. Normally one minute at each RPM is sufficient to do this. At lower RPMs, the oxidized polymer that has adhered to the barrel and screw or in a corner is carried out with the purge compound. At higher RPMs, the velocity of the purge at the walls is effective in removing the polymer on the walls. Periods of high RPM / output are essential to an effective purge.



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