

NOVACHEM

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WHAT IS **SUPERNOVA™** XB

SuperNova™ XB is NOVACHEM's brand of ammonia free and powder free chemical purging compound formulated expressly for use in Extrusion Blow Molding Systems. It removes residues of old colors, previous production materials and degraded thermoplastics from heads, accumulators and extruders. SuperNova™ XB chemical purging compound is certified as compliant with all FDA regulations regarding use in incidental food contact applications. The by-products of the SuperNova™ chemical process are carbon dioxide and water vapor.

INSTRUCTIONS FOR USE IN EXTRUSION BLOW MOLDING EQUIPMENT

The Basic Instructions on Page 2 for using SuperNova™ XB will work effectively for:

- Extrusion blow molding machines without accumulators or vented barrels.
- All thermoplastics except temperature sensitive materials such as PVC, ABS, acetal (Delrin™, Celcon™, etc.), TPR's, etc.

For specific instructions in other cases see the following:

- For systems with **Accumulators**, see Page 3
- For systems with **Vented Barrels**, see Page 3

IF THERE ARE ANY QUESTIONS ABOUT USING SUPERNOVA™, CALL NOVACHEM TECHNICAL SUPPORT, TOLL FREE AT:

1-800-762-3984

WRITTEN INQUIRIES CAN BE FAXED TO US AT 1-203-367-0647.

BASIC INSTRUCTIONS

- 1. EMPTY** the machine of the production resin. Keep the extruder (screw and barrel) at 350°F to 400°F (180°C to 205°C). Raise heats in all zones after the extruder, especially low velocity areas, dead spots and the heads, to at least 450°F (235°C). If multiple heads are present, the outboard heads should be heated 50°F (30°C) higher than the inboard heads. SuperNova™ XB is heat activated and best results are obtained at 500°F to 600°F (260°C to 315°C). Make sure to clean all production material out of the feed area.
- 2. FLUSH** the machine by running clean natural HDPE that is stiffer than your production resin until, in your judgment, the bulk of the residual production resin has been pushed out of the machine. Run the machine empty again.
- 3. HEAT SOAK** the machine with the system empty for 15 minutes after temperatures have lined out.
- 4. LOAD** the machine with SuperNova™ XB purging compound. Fill the system until SuperNova™ XB material emerges uniformly from the heads. Keep the heats up – SuperNova™ XB purging compound is heat activated.
- 5. SOAK** the system with the screw stopped and in the forward position for 30 minutes. Take a shot every 5 to 10 minutes during the soak to keep the heads full of SuperNova™ XB. Keep the throat full of SuperNova™ XB.
- 6. PURGE** the system empty of the SuperNova™ XB material. If the machine was heavily contaminated and you see visible contamination or black specks as the last of the SuperNova™ XB empties from the machine, another purge is needed. Repeat steps 4, 5 and 6.
- 7. WAIT** 5 to 10 minutes after emptying SuperNova™ XB material from the machine, so that the last residues of SuperNova™ XB's chemical ingredients can break down its carrier resin.
- 8. FLUSH** the machine at elevated temperature with HDPE to remove all traces of SuperNova™ XB. If this is a shutdown purge, stop now and cut the heats. Otherwise, reset temperatures for normal operation.
- 9. RUN** the new production material to begin normal production.

TEMPERATURE SENSITIVE RESINS

...if you are processing a temperature sensitive resin such as PVC, ABS, acetal (Delrin™ or Celcon™), TPR's, etc. The temperatures recommended for SuperNova™ XB purging compound will degrade these resins. **Call NOVACHEM (1-800-762-3984) for technical support!**

IF YOU HAVE ACCUMULATORS

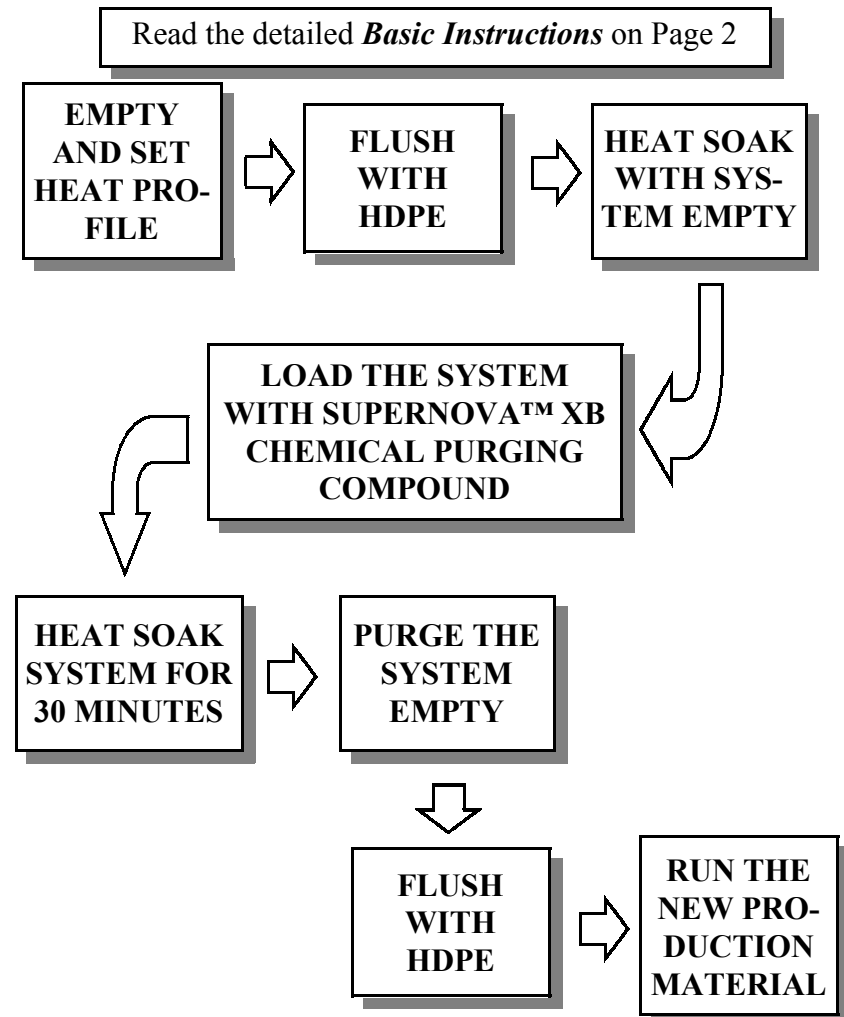
1. Increase the shot size by 10% (if possible, move ram back).
2. While **LOADING** the machine with SuperNova™ XB purging compound (Step 4) run the accumulator on automatic. Operate the accumulator at least 2 – 4 times to ensure that the system is completely filled with SuperNova™ XB material.

IF YOU HAVE VENTED BARRELS

Because the gases released by SuperNova™ XB are essential to its cleaning action, barrel vents must be capped. Take the following steps:

1. **CLEAN** vent opening manually and close the vent with a cap.
2. **RAISE** the decompression zone heats about 25°F (15°C).
3. Perform steps 1 through 9 of the Basic Instructions, Page 2. In step 3, **VARY** the speed of the screw while running SuperNova™ XB in the machine. This changes the speed of the material as it flows past the vent opening and ensures complete and even filling.

CAUTION: SuperNova™ XB purging compound releases carbon dioxide and water vapor during the cleaning process, and these gases can cause pressure build up under improvised vent caps. Use caution in capping vents and in keeping clear of vent caps during the purge.



IF THERE ARE ANY QUESTIONS ABOUT USING SUPERNOVA™ CHEMICAL PURGING COMPOUND, CALL NOVACHEM TECHNICAL SUPPORT, TOLL-FREE, AT: 1-800-762-3984

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