

CONVERSION FROM HFC TO HFO BLOWN CLOSED CELL FOAMS

Spray/pour the foam immediately after completing these switchover procedures - **pump it out** – Do not allow the resin to sit in the machine/hoses after completing these switchover procedures.

With the development of the HFO blowing agent for closed cell insulation foams, construction specifications are mandating the use of these foam systems in many designs. Additionally, some states are passing laws mandating the use of HFO blown foam in their state. NCFI has formulated systems which incorporate the HFO blowing agent. The A-side of remains the same, there is no requirement for changing the A-side.

Unlike prior conversions in past years, this new ingredient is not compatible with many of the raw materials commonly used in spray and pour foams. As a result, contractors and in-plant personnel will have to exercise caution when transitioning from the current HFC blown foams to the new formulations.

*The following precautions **must be followed**:*

The boiling point of HFO 1233zd is slightly higher than HFC 245fa, so handling may be slightly more forgiving. Vapor pressures of the two blowing agent resin blends are still similar enough that the same precautions in storage and handling should be maintained.

B-side (resin) holding tanks (including day tanks) and recirculating lines must be completely drained before refilling with HFO blown product. This refilling should then be promptly (hours not days) run through the spray or pour equipment to avoid any residue material clinging to the tank walls negatively reacting with the resin. It may not be necessary to use up the entire tank, but using enough of the tank to the prior level before draining will help avoid contamination.

If using drum pumps, the resin pump wet well should be emptied and the wet surface should be wiped clean before inserting into the HFO blown resin drum. Promptly pump enough of the foam to completely purge the equipment. The foam should be of acceptable quality so that the finished foam can be utilized on a job (just as normally switching from one drum to another). The movement of resin under pressure through the hoses, pumps and heaters will insure that equipment is purged cleanly. Again, do not pump HFO blown resin into the machine and let it sit—**pump it out**. HFO blown resins will not affect machine components or hoses, but resins blown with HFCs and HFOs intermingled in the machine and hoses and left unpurged will produce foam with coarse cells and poor physical properties. The amount of material required to properly purge your equipment will vary according to machine type and hose length. If you are unsure of the quantity needed, call NCFI with the particulars of your machine set up and our technical service department can assist you.

It is essential that pour ups of partial drums be segregated. Do not intermix the two blowing agents since the two resins are incompatible. The longer the two liquids are mingled, the greater the impact on cell structure and ability to produce a quality end product.

If there are questions, contact your account manager or the technical service department at 800-346-8229 (option 4).