



SPF System Weatherization/ Storage Procedure

Items required:

- (3) 5 gal buckets
- PPE to include Full face respirator, chemical resistant suit, gloves
- Plastic for ground protection
- 1-2 cans of brake cleaner or carb cleaner
- 5 gal of NZD ISO flush or comparable flushing solution.
- 5 gal of DOP or comparable plasticizer

Please read all instructions before attempting this procedure.

Please feel free to reach out to a Carlisle technical representative if you have any questions or concerns regarding a comparable flushing or plasticizer product.

Solvent flushes are very reactive, do not use heat when recirculating/flushing system. Do not attempt to save any ISO or Resin material from your supply, recirculation or hose system, as the chances for contamination are high. Please flush entire system and dispose of properly as waste material. Attempts to save the SPF chemicals in the line could result in contamination of drums of material.

Step 1:

Machine should be in the off position for this procedure. All pumping can be run off transfer pump pressure. No heat should be used when flushing system.

- Remove transfer pump from ISO drum and clean all residual isocyanate from exterior of the pump. Seal ISO drum tightly. Store drum within manufacturers recommended conditions.
- Pour 2.5 gal of NZD ISO flush into a clean 5 gal bucket secure and transfer pump into bucket.
- Place the return line into an empty waste drum or into an empty 5 gal bucket
- Turn on the transfer pump
- Place the pressure relief valves into the recirculating position to push remaining ISO out of the supply line and return line.
- Flush until solvent is running clear from the recirculation line. Pump off or transfer pump pressure not recirculation mode off your machine.

If machine is not equipped with return lines, purge into second waste bucket from recirculation block.

- Shut off transfer pump while leaving it in the ISO flush bucket, close recirculation line

Step 2:

- Remove spray gun from fluid manifold. Place fluid manifold into waste drum or empty 5 gal bucket.
- Make sure the recirculation lines are in the spray position.
- With the transfer pump still in the NZD ISO flush bucket, turn on the transfer pump
- Open the A side valve on the fluid manifold into your waste drum or waste bucket.
- Push out all remaining isocyanate from spray hose until solvent is running clear.
- Shut off A side valve on the fluid manifold and place manifold into clean 5 gal bucket. This material can be saved for future use and should be kept separate from the ISO contaminated waste material from before.
- Pour remaining NZD ISO flush into transfer pump bucket.
- Open A side valve into this clean material bucket and allow the transfer pump to push remaining material into clean bucket until transfer pump bucket is empty.
- With the transfer pump in the empty bucket, slowly “dry cycle” until clean NZD ISO Flush solvent has been completely returned into our clean, sealable container.

This step uses the air pushed by the transfer pump to push out remaining solvent before introducing new chemicals. “Dry-cycle” means to allow transfer pump to cycle at a slow and controlled Speed with no chemicals running through the pump.

Perform this by holding pump vertical in an empty bucket and reducing the air consumption until pump cycles approximately once per second.

- Push air through until no chemical exits the A side fluid manifold.
- Shut off Transfer pump, close A side valve on fluid manifold.
- **Do not put lid on container for 24 hours**, once completed, this clean solvent can be used for future use. Do not use this flush for the Resin side.

NZD ISO Flush cannot stay in your lines so after using it to remove the Isocyanate we will now flush the system with DOP and leave that in the system for long term storage.

Step 3:

- Pour DOP Plasticizer into a clean 5 gal bucket, place the transfer pump into bucket and secure it.
- Place the return line into an empty waste drum or into an empty 5 gal bucket
- Turn on the transfer pump
- Place the pressure relief valves into the recirculating position to push remaining NZD ISO Flush out of the supply line and return line.
- Flush until DOP solvent is running clear. Pump off transfer pump pressure not recirculation mode off your machine.

If machine is not equipped with return lines, purge into second waste bucket from recirculation block.

- Shut off transfer pump while leaving it in the DOP bucket.
- Close recirculation line

Step 4:

- Remove spray gun from fluid manifold. Place fluid manifold into waste drum or empty 5 gal bucket.
- Make sure the recirculation lines are in the spray position.
- With the transfer pump still in the DOP bucket, turn on the transfer pump
- Open the A side valve on the fluid manifold into your waste drum or waste bucket.
- Push out all remaining NZD ISO Flush from spray hose. Allow to flush for a few minutes.
- Shut off Transfer pump.
- Close A side valve on fluid manifold.

If SPF system will be in storage for an extended period, the Resin “B” side should also be addressed. Some resin chemicals can be corrosive to the internal pumping components and hose linings.

The Resin side can be flushed and stored with DOP or similar plasticizer. No need to flush with the NZD ISO Flush. Please follow safety steps mentioned above.

Dispose of contaminated materials in accordance to all federal, state and local guidelines.

- Clean harbors
- Hazardous waste experts