

## How to Use Rx11-flush®

- Flush systems after burn-outs
- Flush line sets in preparation for retrofitting to new refrigerants such as R-410A
- Flush systems before new component installation
- Low boiling point ensures complete evacuation and leaves no residue

### PRODUCT

Rx11-flush was designed to quickly and easily flush air conditioning and refrigeration systems and line sets, particularly after a compressor failure, during a refrigerant retrofit, or at a new system installation. Formulated with DuPont Vertrel® solvent, Rx11-flush is an azeotropic cleaner that is fast acting, fast evaporating, compatible with system components, nonflammable and noncorrosive.

### GENERAL GUIDELINES:

1. See application bulletin 3-112 for additional details. Be sure adequate ventilation is provided during the entire procedure. You will need:
  - Rx11-flush canister(s), Injection Valve (4300-89), Rx11-flush Hose (4300-52), Rx11-flush Gun (4300-51), low pressure nitrogen (120 psi) and empty waste container.
  - One 1 lb. canister will clean a 5-7 ton system or up to 5 line sets while a 1 lb. canister will clean a 3-4 ton system or 1-2 line sets. The amount will vary depending on line configuration and contamination level.
2. Use safety glasses and rubber gloves. Use appropriate, established service practices.
3. **DANGER:** Never connect this canister to nitrogen via manifold sets or other charging hoses! Failure to insure system is free of pressure when injecting Rx11-flush may cause the can to burst and result in injury.

### FLUSHING LINE SETS

1. Establish one end of line set as the exit point and crimp or restrict this exit point in order to increase mass flow and contact time of Rx11.
2. Connect the Rx11 Injection Valve (4300-89)\* to Rx11-flush canister; do not over tighten. The valve is equipped with a 1/4" flare fitting which will connect to your charging hose. Do not connect charging hose directly to canister's threaded fitting.



### PACKAGING

1 lb. Canister:	4300-09 (flushes 3-4 tons)
2 lb. Canister:	4300-11 (flushes 5-7 tons)
"2+1" Display Pack:	4300-10 (flushes 14 tons)
13 lb. Cylinder:	4300-15 (flushes up to 50 tons)
26 lb. Cylinder:	4300-26 (flushes over 50 tons)
Starter Kit:	4300-08
Flushing Tool:	4300-50
Rx11-flush Gun:	4300-51
Rx11-flush Hose (24"):	4300-52
Injection Valve:	4300-89

3. Inject Rx11 into line set using Rx11-flush Gun (4300-51) and Hose (4300-52).
4. The amount of Rx11-flush needed to adequately clean and flush a line set will vary due to oil load, line configuration, etc. Typically, the following guide can be followed:
  - Up to 1/2" tubing: Use a 20-30 second burst of Rx11-flush through each line for every 50 feet. Use a 7-10 second burst with 13 and 26 pounders. This would represent a typical residential retrofit or flushing, and the popular 2 lb. canister of Rx11-flush can be expected to flush 8-10 lines or 4-5 line sets.
  - Up to 7/8" tubing: Use a 60-90 second burst of Rx11-flush through each line for every 50 feet. Use a 20-30 second burst with 13 and 26 pounders.
5. Follow the Rx11-flush with compressed nitrogen (120 psig) to increase mass flow for maximum cleaning. **DANGER:** Insure the Rx11-flush canister is not connected to the nitrogen purge.
6. Pull vacuum to remove any residual solvent.
7. Line set is clean and ready for service.

## FLUSHING AFTER BURNOUTS

1. If possible, flush system in sections.
2. Disconnect compressor and electricity. It is recommended that TXV's and capillary tubes also be disconnected or by-passed, but is not required.
3. Remove filter driers.
4. Install a container or pail at outlet point of flushing to catch used oil, sludge, and other flushed material, which should be properly disposed.
5. If possible, install or create a slight restriction at the outlet point; this will enhance contact time and result in a better flushing.
6. Connect the Rx11 Injection Valve (4300-89)\* to Rx11-flush canister; do not over tighten. The valve is equipped with a 1/4" flare fitting which will connect to your charging hose. Do not connect charging hose directly to canister's threaded fitting.
7. Connect the HFC-dedicated charging hose to the point of injection. If desired, utilize the Rx11-flush Gun to simplify control. If flushing through service port remove valve core.
8. Inject Rx11-flush into the system.
9. Follow the Rx11-flush with compressed nitrogen (120 psig) to increase mass flow for maximum cleaning. DANGER: Insure the Rx11-flush canister is not connected to the nitrogen purge.
10. Evaluate system for cleanliness.
11. Either inject additional Rx11-flush or make repairs and secure system. If appropriate, charge system with Rx-Acid Scavenger® as insurance to protect against acid contamination.
12. Evacuate system, leak check, and add oil and refrigerant if satisfactory. NOTE: Never flush the compressor itself. This canister has been designed to dispense all of its contents in an upright position. If local regulations permit, recycle this canister.
13. Reuse: If any remains in canister, it can be saved for future flushing. Simply turn Injection Valve fully counter clockwise and remove from canister.

\* The Injection Valve (4300-89) is equipped with an audible pressure relief alarm that will sound if canister is inadvertently connected to a source of high pressure. If alarm sounds, immediately disconnect hose from source of high pressure. The valve is set to factory specs and should not be adjusted.

## TECHNICAL DATA

Ozone Impact: Zero

Flash Point: None

NFPA Ratings: Health=1, Fire=0, Reactivity=1

See the MSDS for additional safety information.

