A2L System Evacuation Technical Bulletin

The TEZ8 vacuum pump is compatible to use with systems that utilize A2L refrigerants. Due to the mildly flammable nature of A2L refrigerants, it is important to ensure proper technical training prior to handling these refrigerants. Some jurisdictions may require special licensing or certification before handling flammable refrigerants. Additional regulations or guidelines may be required by your local, state, or federal agencies. Check your local occupational health and safety codes.

Proper precautions should be followed when servicing or evacuating a system that contains A2L refrigerants.

These precautions include, but are not limited to the following:

- Always verify that the vacuum pump is operating normally before performing an evacuation. If you suspect the vacuum pump may have an issue it must be serviced by an Appion Factory Service Center.
- A temporary flammable zone should be created with a 3-meter perimeter around the work area.
- Place “No Smoking”, “Do Not Enter”, and any other appropriate warning signs in the area.
- A CO2 or dry powder-type fire extinguisher should be available within the work area.
- Use a suitable flammable gas detector to monitor the air in the work area for refrigerant gas concentrations.
- Ensure adequate ventilation of the area.
- Service equipment should be connected to and disconnected from a power source outside of the flammable zone.
- Properly ground the vacuum pump, hoses, system, and other elements to prevent static buildup.
- Do not reset the service equipment circuit breaker unless power has been removed from the equipment or the area is free of ignitable concentrations.
- Disable and lock off the power to the system being serviced.
- **Do not mix A2L refrigerants with air**. All precautions must be taken to eliminate the mixing of air with flammable refrigerants. **This includes the use of a gas ballast during evacuation**.
- In instances where flammable gases or material have the potential to pass through the pump mechanism with a gas ballast, a gas ballast adapter should be fitted to the pump. A gas ballast adapter allows the user to introduce an inert gas, such as nitrogen or argon, rather than atmospheric air to prevent an explosive mixture from occurring within the pump mechanism.
- The system should be purged with oxygen-free dry nitrogen (OFDN) after refrigerant recovery and prior to evacuation. Do not use compressed air or oxygen.

Always use “best practices” when it comes to safety and follow all proper training procedures!