



A2L Refrigerant Recovery Suitability

A2L “mildly flammable” refrigerants, such as R32 and R1234yf, are becoming increasingly popular due to better efficiencies and lower ODP/GWP numbers than other refrigerants. However, due to the mildly flammable nature of these refrigerants, it is important to ensure proper technical training and compatible equipment is in place prior to recovering these refrigerants.

Unlike A3/hydrocarbons, A2L refrigerants are characterized by a lower burning velocity, as well as only igniting due to a combination of a high leak rate and significant, focused ignition energy. For example, static electricity is unlikely to ignite a small leak of R32 on an outdoor unit. Also, once ignited, A2L refrigerants have a “very slow” burning velocity.

For recovery equipment, it is important that adequate airflow is present to prevent accumulation of any leaked refrigerant near the recovery machine. It is also important that this airflow keeps the compressor components cool; it is not enough to simply have airflow nearby.

Appion refrigerant recovery machines (G5Twin and G1Single) utilize a high-speed gear-driven fan assembly, generating over 600cfm of cooling airflow through the machine. This prevents any accumulated refrigerant leaks at or near the machine or its electrical components.

With proper training and technical procedures, the G5Twin and G1Single units can safely be used to recover A2L refrigerants, in accordance with relevant regulatory guidance.

NOTE: As of February 2016, most regulatory agencies remain in a “pending” status for final guidance on the recovery of A2L refrigerants, such as R32 and R1234yf. Check with your local regulatory agencies for any requirements specific to A2L refrigerant recovery.

**Always use “best practices” when it comes to safety! In addition to following proper training procedures, be sure to review Appion's Tech Bulletin:
“Recovery Safety with A2L Refrigerants.”**