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SAFETY ALERT

Do Not Use Refrigerant Recovery Machines for Marijuana Oil Extraction

Refrigerant recovery machines are designed for handling **only non-flammable** refrigerants, and should only be used **by certified refrigerant technicians** for use in accordance with Section 608 and Section 609 of the US Clean Air Act.

Marijuana processors are using refrigerant recovery machines outside of their designed specifications to recover butane, CO², or other solvents in vapor or liquid form, for the purpose of extracting oils from organic materials (*commonly referred to as “BHO” or “Closed Loop” extraction*).

1. The pumping of flammable compounds into tanks at high pressures or into tanks creates explosion hazards. Despite being referred to as “closed loop,” these processes rely on many temporary connections and possible leak points, which expose the user to a high risk of serious injury or death.

2. Refrigerant recovery machines are typically NOT “food-safe.” Substances used in the extraction process may cause corrosion of the brass, copper, and aluminum used in the recovery machine. The seals and gaskets used in recovery machines can also break down in the presence of the substances involved in the extraction. Usage of refrigerant recovery machines may introduce harmful or toxic substances into the extraction process, which **may result in oil extracts that are not fit for human consumption.**

NEVER USE refrigerant recovery equipment with flammable substances. Refer to our **Safety Alert: Hydrocarbon Explosion Hazards** for more information.

Industry Safety Alert:

Hydrocarbon Explosion Hazards with Refrigerant Recovery Machines

Explosion hazards always exist when pumping or handling flammable gases or fluids. Refrigerant recovery machines are NOT designed to pump Hydrocarbons nor flammable liquids or gases (they are designed for specifically non-flammable refrigerants only). Flammable compounds are being used more frequently in refrigeration systems, and as distillation solvents in other industries. **The pumping of these compounds into tanks at high pressures or into tanks creates explosion hazards.**

Here's how:

- Air can be drawn into a system inadvertently at any point due to leaks in fittings, gaskets or seals to create an explosive mixture of air and the flammable compound.
- Any ignition source, including static electrical discharge or heat can cause a sealed tank, vessel or any contained volume with the correct mixture of air and combustible gas to explode.
- Moreover, electrical components and relays produce internal electrical discharges that can ignite any flammable gases that may have leaked into the surrounding air from any discharge of flammable gas into the surrounding environment – *Note: This can include the vapors from spilled gasoline or alcohol (any flammable liquid).*

The handling of any flammable compounds should only be undertaken by thoroughly trained professionals, and only using certified explosion-proof devices in explosion proof environments.

Flammable compounds are NOT safe to pump or recover using standard equipment under any circumstances.