

Toolbox Talk Refrigerants



What?

- Refrigerants are colourless volatile liquids and vapours used in the heat exchange cycle usually to enhance efficiency and form part of the reversible phase transition from a liquid to a gas.
- They are used in J & E Hall International's applications to act as a coolant and typical gases used in this process include; R717 / R134a / R410a

Why?

- Refrigerant gases are heavier than air and can cause suffocation by reducing the oxygen available for breathing
- This is often exacerbated within a confined space and low lying areas
- Refrigerant can cause frostbite, heart arrhythmia (irregular heartbeat), burns and irritation

Do



- ✓ Make sure you are properly trained and authorised to work on the system
- ✓ Take time to understand how the system operates and the key isolation points
- ✓ Check the vessel / system pressure prior to commencing work.
- ✓ Carry out a risk assessment for the task and adopt a suitable safe system of work
- ✓ Keep in mind the hazards created by refrigerant gases such as suffocation, heart problems, burns and frostbite
- ✓ Wear appropriate Personal Protective Equipment to protect against these hazards
- ✓ Report any leaks immediately



Don't



- ✗ Work on equipment containing refrigerant without the correct training or permit to work
- ✗ Enter confined areas or spaces containing refrigerant equipment or plant unless it is clear of refrigerant gas
- ✗ Use damaged or defective equipment
- ✗ Forget to put on appropriate Personal Protective Equipment (PPE) beforehand
- ✗ Remove PPE until it is safe to do so
- ✗ Ignore obvious signs of damage or wear and tear report it so that it can be repaired or replaced



Permit to work
All contractors must
obtain a valid permit
to work on the site