



**Australian Government**  
**Department of the Environment**



## FACT SHEET 6

### Alternative Refrigerants - FAQs

The Act controls the manufacture, import and export of all ozone depleting substances (ODSs) and synthetic greenhouse gases (SGGs) while the Regulations control major end-uses. According to a recent, industry-wide study<sup>[1]</sup>, these gases make up approximately 89% of all refrigerant gas currently in use.

The remaining 11% of 'alternative' refrigerants (alternative to SGGs) include ammonia, carbon dioxide and hydrocarbons. These gases are not covered by the ARC licence scheme.

Some commonly asked questions and answers about alternative refrigerants

#### **Q - Do I need an ARC licence to handle alternative refrigerants - like hydrocarbons?**

A – Only fluorocarbon-based refrigerants are covered under the ARC licence scheme and the *Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995*.

If you are recovering fluorocarbon gas from a system – whether from stationary or automotive equipment – and replacing it with an alternative refrigerant, you will require an appropriate refrigerant handling licence through the ARC.

You can find out more, including what type of ARC licence you require for the type of work you are doing, by going to the ARC website at [www.arctick.org](http://www.arctick.org)

#### **Q – Do I need any licences or cards to use alternative refrigerants – like hydrocarbons?**

A – An ARC licence is not required to handle alternative refrigerants as they are not listed as scheduled substances under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*. However, other licence requirements may apply, for example, in relation to Work Health and Safety and dangerous goods requirements.

Contact your relevant state/territory agency to find out what your obligations are. You can visit the Safe Work Australia website to find the relevant work health and safety authority in your state or territory: <http://www.safeworkaustralia.gov.au/sites/SWA>

#### **Q – What are the safety issues when using alternative refrigerants?**

A – The *AIRAH Flammable Refrigerants Safety Guide* sets out in detail the safety considerations when handling and using flammable refrigerants such as hydrocarbons. This booklet can be downloaded from the AIRAH website – [www.airah.org.au](http://www.airah.org.au).

More information on the safety considerations when using flammable refrigerants and transitioning to low-global warming potential refrigerants is available on the Department of the Environment's website at: <http://www.environment.gov.au/topics/environment-protection/ozone/ozone-resources>



**Q – Can alternative refrigerants be used in air conditioners (stationary and car) and refrigerators?**

A – Generally, equipment is designed for a particular refrigerant. Equipment manufacturers, gas suppliers, refrigeration engineers and state and territory work health safety regulators, can provide advice on equipment and refrigerant selection, as well as warranties and safety.

All refrigerants should be handled with care as each refrigerant comes with its own unique risks, some are toxic, some are flammable and some are used under high pressure.

If substituted incorrectly, or used in unsuitable equipment without an appropriate risk assessment and consideration of relevant work health and safety procedures, all refrigerants can pose a safety hazard.

**Q – Is there any training available for the use of alternative refrigerants?**

A – The E-Oz Energy Skills Australia website provides information on training for the use of alternative refrigerants in stationary refrigeration and air conditioning systems. [www.ee-oz.com.au](http://www.ee-oz.com.au)

A – Contact relevant Registered Training Organisations in your area to determine whether they deliver this training. The Training Organisations directory on the ARC website can be used as a guide. [www.arctick.org/training\\_organisation.php](http://www.arctick.org/training_organisation.php)

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<sup>[1]</sup> Expert Group, in association with Thinkwell Australia. 2013. *Cold Hard Facts 2: A study of the refrigeration and air conditioning industry in Australia*: <http://www.environment.gov.au/resource/cold-hard-facts-2-study-refrigeration-and-air-conditioning-industry-australia> [accessed 27/11/2013]