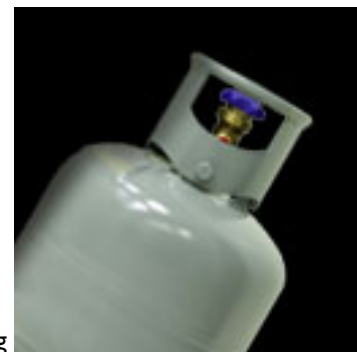


Guidance on Use of HCFC Refrigerants

This bulletin provides a brief overview of the rules regarding the use of HCFC refrigerants such as R22. It provides an update for refrigeration engineers, based on the new EU Ozone Regulation (EC 1005-2009) that came into force on January 1st 2010.

For further information on the EU Ozone Regulation please refer to F-Gas Support guidance document RAC 8 (download from F-Gas Support website www.defra.gov.uk/fgas).



1. What can I do with virgin HCFC (e.g. R22)?

- It *cannot* be used for plant servicing and maintenance. Existing stocks of virgin HCFC *must not* be used to top up a plant.
- You should return it to the original supplier. This may be subject to a charge.

2. What HCFC can I use for plant maintenance?

- Recycled
- Reclaimed

3. What is the difference between recycled and reclaimed refrigerant?

- Recycled HCFC has been recovered from an existing refrigeration circuit and subjected to a basic cleaning process, e.g. passed through a filter/drier.
- Reclaimed HCFC has been recovered from an existing refrigeration circuit and chemically processed to a specified standard and identified as such by the label.

4. How and where can they be used?

- Until 31 December 2014, recycled HCFC can only be used at the site it came from or other sites belonging to the same owner.
- Reclaimed HCFC can be purchased and used for service and maintenance of any existing RAC equipment until December 31st 2014.

5. What do I do with unwanted HCFC recovered from equipment?

- It is illegal to vent unwanted refrigerant. It must be recovered by a qualified engineer.
- After recovery, if not returned to the system, it should be handled in accordance with hazardous waste regulations and returned for disposal or reclaim.

6. Are there any other new requirements related to HCFCs since the new Ozone Regulation came into force?

- All equipment, to which recycled or reclaimed HCFCs have been added, needs to be labelled to show the total refrigerant charge and the type of HCFC contained.

- The leak checking frequencies are now the same as for F gases, so equipment containing 3-30 kg requires an annual leak check, 30-300 kg a six monthly leak check and over 300 kg a three monthly leak check. For HCFCs it is not mandatory to fit automatic leak detection. Any detected leakage must be repaired as soon as possible and in any event within 14 days. The equipment /system must be checked for leakage within 1 month after a leak has been repaired to ensure that the repair has been effective.
- For equipment that contains 3 kg or more of HCFC refrigerant, records in a similar format to those required for the EC F gas Regulation must now be kept.
- For all sizes of HCFC equipment records need to be kept when recycled or reclaimed refrigerants are used to service or maintain equipment. The record needs to show the source of recycled HCFCs or supplier of reclaimed HCFCs.
- Recovered refrigerant is a product removed from a system with NO basic cleaning, this material should be treated as hazardous waste at all times, and can only be returned to the system from which it was removed or stored before disposal or reclaim.
- All individuals must hold suitably recognised certificates to work on equipment containing or designed to contain F gases. See below for details.

Definitions and clarifications

Virgin refrigerant is a product manufactured to an internationally agreed standard and specification (ARI 700)

Recycled refrigerant moved to another site belonging to the same owner is treated as hazardous waste and accompanied by Consignment Note(s).

Recovered refrigerant is a product removed from a system with NO basic cleaning, this material should be treated as hazardous waste at all times, and can only be returned to the system from which it was removed or stored before disposal or reclaim.

Individual qualifications are defined in the GB Ozone Regulations (S.I. 216 2009) ie. City & Guilds 2079 (Category I or II); CITB J11 or J12 (Older qualifications City & Guilds 2078 or CITB J01 are also acceptable).

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