

Department for Environment, Food and Rural Affairs

General Guidance

Guidance: F Gas and Ozone Regulations

Information Sheet GEN 1: Glossary

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This was archived in January 2015
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This Information Sheet provides a summary of definitions, acronyms and other commonly used terminology in the EU F gas and Ozone Regulations.

Abbreviations

CFC	Chlorofluorocarbon Family of chemicals that was historically used in various applications such as refrigeration, foam blowing, aerosols. Now completely banned under Ozone Regulation.
F gas	Fluorinated gases Fluorinated greenhouse gases covered by in the Kyoto Protocol i.e. HFCs, PFCs and SF ₆ (ibid.).
GHG	Greenhouse gas
GIS	Gas insulated switchgear Used in very high voltage electricity circuit breakers.
GWP	Global warming potential This represents the “strength” of a gas in terms of impact on global warming – compared to CO ₂ which has a GWP = 1.
HC	Hydrocarbon Family of chemicals including propane, butane etc. These have been adopted as alternatives to O ₃ and F-Gases in some applications.
HCFC	Hydrochlorofluorocarbon Family of chemicals used in various applications such as refrigeration, foam blowing, aerosols. Already phased out in many applications under Ozone Regulation. All applications will be banned in EU by 2015.
HFC	Hydrofluorocarbon Family of chemicals used in various applications such as refrigeration, foam blowing, aerosols.
HFE	Hydrofluoroether Family of chemicals that can be considered as HFC alternatives in some applications e.g. fire protection systems.
MAC	Mobile air-conditioning Air conditioning in vehicles, especially in cars.
MDI	Metered dose inhaler Medical aerosol used to dispense certain drugs (e.g. inhalers for asthma treatment).
OCF	One Component Foam A specialised aerosol delivering a type of polyurethane foam that is used in the construction industry.

ODS	Ozone depleting substance Various chemicals, including CFCs and HCFCs that damage the ozone layer. Many are already completely phased out.
PFC	Perfluorocarbon Family of F gas chemicals used in a few unusual applications such as electronic chip manufacture and certain refrigerants.
PPC	Pollution Prevention and Control Regulation of certain industrial processes in respect of emissions to air, land and water.
RAC	Stationary Refrigeration, Air-conditioning and heat pump equipment.
SF₆	Sulphur hexafluoride An F gas. Used in a few unusual applications such as magnesium smelting and HV switchgear.

Definitions

The following definitions are taken from the EU F gas Regulations, EU Ozone Regulations and related Regulations on qualifications and the GB F gas Regulations (SI no. 261).

Calibrated	In the definition of leakage detection system, "calibrated" is not defined in the Regulation, but is intended to mean, for example, a leakage detection system that can tell the difference between a large leak and a small leak. <i>Defra guidance on EU F gas Regulations, 2006</i>
Container	Means a product which is designed primarily for transporting or storing fluorinated greenhouse gases. <i>From EU F gas Regulation 842/2006</i>
Course of training	Includes the training of an employee while that employee is engaged in work for which he is employed. <i>GB F gas Regulations, Statutory Instrument No.261</i>
Destruction	Means the process by which all or most of a fluorinated greenhouse gas is permanently transformed or decomposed into one or more stable substances which are not fluorinated greenhouse gases. <i>From EU F gas Regulation 842/2006</i>
Dual evaporator system	Means a system where one evaporator is mounted in the engine compartment and the other in a different compartment of the vehicle; all other systems shall be considered 'single evaporator systems'. <i>EU Directive on emissions from mobile air-conditioning equipment in vehicles 40/2006</i>

Employed	Means employed under a contract of employment and “employee” and “employer” are construed accordingly. <i>GB F gas Regulations, Statutory Instrument No.261</i>
Fluorinated greenhouse gases	Means hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6) as listed in EU F gas Regulations Annex I (and Information Sheet GEN 2) and preparations containing those substances, but excludes substances controlled under Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer (amended). <i>From EU F gas Regulation 842/2006</i>
Global warming potential (GWP)	Means the climatic warming potential of a fluorinated greenhouse gas relative to that of carbon dioxide. The GWP is calculated in terms of the 100-year warming potential of one kilogram of a gas relative to one kilogram of CO ₂ . A list of GWPs relevant to the EU F gas Regulations are published in the third assessment report (TAR) adopted by the Intergovernmental Panel on Climate Change (2001 IPCC GWP values) and repeated in the Annex to the EU F gas Regulations. <i>From EU F gas Regulation 842/2006</i>
Heat pump	Means a device or installation that extracts heat at low temperature from air, water or earth and supplies heat. <i>From EU F gas Regulation 842/2006</i>
Hermetically sealed system	Means a system in which all refrigerant containing parts are made tight by welding, brazing or a similar permanent connection which may include capped valves and capped service ports that allow proper repair or disposal and which have a tested leakage rate of less than 3 grams per year under a pressure of at least a quarter of the maximum allowable pressure. <i>From EU F gas Regulation 842/2006</i>
High voltage switchgear	Means switching devices and their combination with associated control, measuring, protective and regulating equipment, and assemblies of such devices and equipment with associated interconnections, accessories, enclosures and supporting structures, intended for use in connection with generation, transmission, distribution and conversion of electric energy at rated voltages above 1 000 V. <i>EU Minimum qualifications for high voltage switchgear 305/2008</i>
Hydrofluorocarbon	Means an organic compound consisting of carbon, hydrogen and fluorine, and where no more than six carbon atoms are contained in the molecule. <i>From EU F gas Regulation 842/2006</i>

Import	<p>Means the entry of substances, products and equipment, covered by the EU Ozone Regulation, into the customs territory of the European Union as far as the territory is covered by an EU Member State's ratification of the Montreal Protocol.</p> <p><i>From EU Ozone Regulation 1005/2009</i></p>
In-house qualification	<p>Means a qualification verified by a certificate of competence or other written confirmation issued by an employer to such of its employees who have successfully completed a course of training provided by that employer relating to the work in question.</p> <p><i>GB F gas Regulations, Statutory Instrument No.261</i></p>
Installation	<p>Means joining two or more pieces of equipment or circuits containing or designed to contain fluorinated greenhouse gas refrigerant, with a view to assembling a system in the location where it will be operated, including the action by which refrigerant conductors of a system are joined together to complete a refrigerant circuit irrespective of the need to charge the system after assembly.</p> <p><i>EU Minimum qualifications for stationary RAC equipment 303/2008</i></p>
Leakage detection system	<p>Means a calibrated mechanical, electrical or electronic device for detecting leakage of fluorinated greenhouse gases which, on detection, alerts the operator.</p> <p><i>From EU F gas Regulation 842/2006</i></p>
Maintenance or servicing	<p>Means all activities, including recovery and checks for leakage which entail breaking into the circuits containing or designed to contain fluorinated greenhouse gases, in particular supplying the system with fluorinated greenhouse gases, removing one or more pieces of circuit or equipment, re-assembling two or more pieces of circuit or equipment, as well as repairing leakages.</p> <p><i>EU Minimum qualifications for stationary RAC equipment 303/2008</i></p>
Non-refillable container	<p>Means a container that is designed not to be refilled and is used in the servicing, maintenance or filling of refrigeration, air-conditioning or heat pump equipment, fire protection systems or high-voltage switchgear, or to store or transport fluorinated greenhouse gas based solvents.</p> <p><i>From EU F gas Regulation 842/2006</i></p>
Novelty aerosol	<p>Means those aerosol generators marketed and intended for sale to the general public for entertainment and decorative purposes as listed in the Annex to Directive 94/48/EC.</p> <p><i>From EU F gas Regulation 842/2006</i></p>

Operator	<p>Means the natural or legal person exercising actual power over the technical functioning of the equipment and systems covered by this Regulation; a Member State may, in defined, specific situations, designate the owner as being responsible for the operator's obligations.</p> <p><i>From EU F gas Regulation 842/2006</i></p>
Perfluorocarbon	<p>Means an organic compound consisting of carbon and fluorine only, and where no more than six carbon atoms are contained in the molecule.</p> <p><i>From EU F gas Regulation 842/2006</i></p>
Placing on the market	<p>Means the supplying of or making available to a third party within the [European Union] for the first time, against payment or free of charge, products and equipment containing or whose functioning relies upon fluorinated greenhouse gases, and includes import into the customs territory of the [European Union].</p> <p><i>From EU F gas Regulation 842/2006</i></p>
Preparation	<p>Means for the purposes of the obligations in the EU F gas Regulation, excluding destruction, a mixture composed of two or more substances at least one of which is a fluorinated greenhouse gas, except where the total GWP of the preparation is less than 150.</p> <p>The total GWP of the preparation shall be determined in accordance with EU F gas Regulations Part 2 of Annex I.</p> <p><i>From EU F gas Regulation 842/2006</i></p>
Undertaking	<p>Means any natural or legal person which:</p> <ul style="list-style-type: none"> (a) produces, recovers, recycles, reclaims, uses or destroys controlled substances or new substances; (b) imports such substances; (c) exports such substances; (d) places such substances on the market; or (e) operates refrigeration, air conditioning or heat pump equipment, or fire protection systems, which contain controlled substances. <p><i>From EU Ozone Regulation 1005/2009</i></p>
Use	<p>Means the utilisation of fluorinated greenhouse gases in the production, refilling, servicing or maintenance of products and equipment covered by this Regulation.</p> <p><i>From EU F gas Regulation 842/2006</i></p>
Reclamation	<p>Means the reprocessing of a recovered fluorinated greenhouse gas in order to meet a specified standard of performance.</p> <p><i>From EU F gas Regulation 842/2006</i></p>

Recovery	<p>Means the collection and storage of fluorinated greenhouse gases from, for example, machinery, equipment and containers.</p> <p><i>From EU F gas Regulation 842/2006</i></p> <p>Means the collection and storage of controlled substances from products or equipment or containers during maintenance and servicing or before disposal.</p> <p><i>From EU Ozone Regulation 1005/2009</i></p>
Recycling	<p>Means the reuse of a recovered fluorinated greenhouse gas following a basic cleaning process.</p> <p><i>From EU F gas Regulation 842/2006</i></p>
Retrofitting	<p>Means installing an air-conditioning system in a vehicle after it has been registered.</p> <p><i>EU Directive on emissions from mobile air-conditioning equipment in vehicles 40/2006</i></p>
Ship	<p>Includes a hovercraft, submersible craft and any other floating craft but not a vessel which permanently rests on or is permanently attached to the seabed.</p> <p><i>GB F gas Regulations, Statutory Instrument No.261</i></p>
Stationary application or equipment	<p>Means an application or equipment which is normally not in transit during operation.</p> <p><i>From EU F gas Regulation 842/2006</i></p>
Vehicle	<p>Means any motor vehicle falling within the scope of the MAC Directive.</p> <p><i>EU Directive on emissions from mobile air-conditioning equipment in vehicles 40/2006</i></p>
Vehicle type	<p>Means a type as defined in section B of Annex II of Directive 70/156/EEC.</p> <p><i>EU Directive on emissions from mobile air-conditioning equipment in vehicles 40/2006</i></p>

The information in this document is intended as guidance and must not be taken as formal legal advice or as a definitive statement of the law. Ultimately only the courts can decide on legal questions and matters of legal interpretation. If you have continuing concerns you should seek legal advice from your own lawyers.

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