

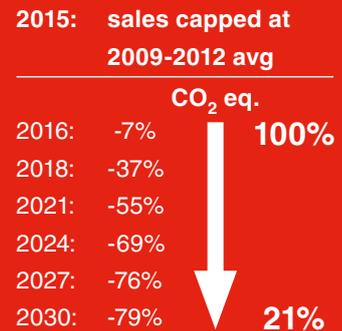
The new F-gas regulation

Introduction

- An EU Regulation is directly applicable in the Member States (contrary to a Directive, which must be transposed into national law).
- The legal base of the Regulation is art 192 of the EU Treaty (Environmental protection). It gives individual Member States a certain discretion to adopt more stringent rules, provided they do not introduce restrictions to the proper functioning of the Internal Market (free circulation of goods, services, capital and people). Examples include taxes or deposits, maximum leakage rates and use permits. Denmark and Austria have ensured that their existing legislation may remain in force.
- Agreed in triologue between European Parliament, Presidency of the Council (Member States) and European Commission.
- Agreement has been approved by full European Parliament on 12th March 2014, and has been adopted by the Council on 14th April 2014.
- During the approval process no changes to the text may be made ('take-it-or-leave-it').
- The Regulation will take effect twenty days after publication in the Official Journal of the European Union (June 2014).
- The Regulation will apply from 1 January 2015.
 - Time between June 2014 and January 2015 is needed for the Commission to adopt several implementing decisions, notably with regard to the quota allocation.
- Structure is six Chapters and six annexes.
- GWP based on the fourth assessment of the IPCC.

Did you know that:

- HFOs are NOT considered fluorinated greenhouse gases
 - Solstice ze
 - Solstice zd
 - Solstice yf
- Genetron Performax® LT (R-407F) can be used for servicing without end date



Annex III: New Placing on the market prohibitions

Products and equipment	Date of prohibition	
Fire protection equipment that contain HFC-23	1 January 2016	
Domestic refrigerators and freezers that contain HFCs [...] with GWP of 150 or more	1 January 2015	
Refrigerators and freezers [...] for commercial use (hermetically sealed systems)	that contain HFCs with GWP of 2500 or more	1 January 2020
	that contain HFCs with GWP of 150 or more	1 January 2022
Stationary refrigeration equipment, that contains, or that relies upon for its functioning HFCs with GWP of 2500 or more except equipment intended for application designed to cool products to temperatures below -50°C	1 January 2020	
Multipack centralised refrigeration systems for commercial use with a capacity of 40kW or more that contain, or that rely upon for their functioning, fluorinated greenhouse gases with GWP of 150 or more, except in the primary refrigerant circuit of cascade systems where fluorinated greenhouse gases with a GWP of less than 1500 may be used	1 January 2022	
Movable room air-conditioning appliances (hermetically sealed equipment which is movable between rooms by the end user) that contain HFCs with GWP of 150 or more	1 January 2020	
Single split air-conditioning systems containing less than 3kg of fluorinated greenhouse gases, that contain, or that rely upon for their functioning, fluorinated greenhouse gases with GWP of 750 or more	1 January 2025	
Foams that contain HFCs with GWP of 150 or more except when required to meet national safety standards	Extruded polystyrene (XPS)	1 January 2020
	Other foams	1 January 2023
Technical aerosols that contain HFCs with GWP of 150 or more, except when required to meet national safety standards or when used for medical applications	1 January 2018	

Note: 'HFCs' refers to blends, not individual components of blends

Annex III: Control of Use

Maintenance and Servicing	Date of prohibition
Virgin F-Gases with GWP>2500 or more for servicing refrigeration equipment with a charge size of 40 tons of CO ₂ eq or more. This service ban is not applicable to military and low temp (- 50°C) equipment.	1 January 2020
Recycled and reclaimed F-gases with GWP of 2500 or more for servicing refrigeration equipment with a charge size of 40 tons of CO ₂ eq or more.	1 January 2030
Pre-charged equipment	Date of prohibition
Refrigeration, air conditioning and heat pump equipment pre-charged with F-gases may not be placed on the market unless F-Gases charged into this equipment are accounted for within the quota system referred to in Chapter IV. When placing pre-charged equipment on the market after that date, manufacturers and importers must issue a declaration of conformity which must be verified by an independent auditor.	1 January 2017

Chapter I – General Provisions

- **Objective** of this Regulation: to protect the environment by reducing emissions of fluorinated greenhouse gases.
- **Definitions** of a wide range of terms. Definitions of **Fluorinated Greenhouse Gases (F-gases)**, and of **Hydrofluorocarbons** are critical.
- **F-gases:** hydrofluorocarbons ('HFCs'), perfluorocarbons ('PFCs'), sulphur hexafluoride ('SF6') and other GHG that contain fluorine, as listed in Annex I, or mixtures containing any of these substances
- **HFCs:** substances listed in section 1 of Annex I, or mixtures containing any of those substances. **Annex I, section 1 excludes HFOs** (Hydrofluoro-olefins), listed in Annex II. Blends containing both HFCs and HFOs will be considered as HFCs and therefore as fluorinated GHG.
- **'Use':** utilisation of F-gases in production, maintenance or servicing, including the refilling, of products and equipment, or in other processes referred. This definition does not cover the use of any substance listed in Annex II.
- **'Placing on the market'** means supplying or making available to another party in the Union for the first time, for payment or free of charge, or using for its own account in the case of a producer, and includes the customs release for free circulation in the Union.

Chapter II – Containment

- Leak checks by certified persons
 - 5 < 50 T CO₂-eq: every year (2 years)
 - 50 < 500 T CO₂-eq: every six (12) months
 - 500+ T CO₂-eq: every 3 (6) months. For these systems a leak detection system is mandatory.
- For these systems, logbooks are mandatory, and the requirements are more detailed than in the 'old' regulation.
- New: suppliers of F-gases must keep records for at least five years of relevant information on the purchasers
- New: suppliers of substances listed in annexes I and II provide evidence that any HFC-23 produced as a by-product during the manufacturing process of the substance is destroyed or recovered for subsequent use, in line with best available technologies. Otherwise, the sale of these substances is prohibited.
- Recovery (by qualified person) of F-gases from stationary equipment, refrigerated trucks & trailers is mandatory for subsequent recycling, reclamation or destruction. For other products recovery is mandatory to the extent that it is technically feasible and does not entail disproportionate costs.
- Article 8 provides detailed requirements for national training and certification schemes. The focus is more on the training and certification of personnel, but there is also mention of certification of companies. Certificates issued under the 'old' F-Gas regulation are grandfathered.

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Chapter III – Placing on the Market and Control of Use

See table with Annex III. Labeling and packaging requirements are quite detailed in this chapter and cover the entire supply chain.

Chapter IV – Cap & Phase-down for HFCs

The total quantity of HFCs that can be placed on the market in 2015 in tonnes of CO₂-eq is maximised at the average quantity placed on the market in the period 2009 – 2012. **The absolute quantity has not been determined**, but based on reported sales data, is expected to be **around 180 mln T CO₂-eq**. The following categories are exempt from the Cap & Phase-down provisions:

- Producers or importers of less than 100 tonnes of CO₂ equivalent of hydrofluorocarbons per year
- HFCs imported into the Union for destruction
- HFCs supplied directly by a producer or an importer to undertakings for use in feedstock applications
- HFCs supplied directly by a producer or an importer to undertakings, for export out of the Union, where those HFCs are not subsequently made available to any other party within the Union, prior to export
- HFCs supplied directly by a producer or an importer for use in military equipment
- HFCs supplied directly by a producer or an importer to an undertaking using it for the etching of semiconductor material and the cleaning of chemicals vapour deposition chambers within the semiconductor manufacturing sector
- From 2018 onwards, HFCs supplied directly by a producer or importer to an undertaking producing metered dose inhalers for the delivery of pharmaceutical ingredients

For each manufacturer and importer who has reported sales under the 'old' F-Gas regulation, the Commission will calculate a 'reference value' (essentially the individual sales average over 2009 – 2012). For 2015, the Commission must communicate these reference values by 31 October 2014. The reference values will be recalculated every three years for sales reported for 2015.

The quota which individual producers and importers may place on the market is equal to 89% of the (recalculated) reference values, the remaining 11% will be allocated on basis of applications by (new) producers and importers. The allocation will be pro-rated to the number of applicants (Annex V). Only companies with a legal presence in the EU and EU-based only representatives of non-EU based exporters are eligible for quota.

Chapter V – Reporting

Producers, importers, exporters, destruction operators and feedstock users of Fluorinated Greenhouse Gases and of substances listed in Annex II must report annually data. This also applies to companies that placed on the market equipment or products containing substances listed in Annexes I and II. Some threshold values apply (100 – 1000 T CO₂-eq). Deadline for the report is 31st March of each year, starting 2015 (for calendar year 2014). If the quantity exceeds 10'000 T CO₂-eq, the reports must be verified by an independent third party by 30 June of each year.

Chapter VI – Final Provisions

This section contains various review clauses, and introduces a 'stakeholder consultation forum', and provides details for the entry into force.

For further information contact your Honeywell representative or contact us at **fluorines.europe@honeywell.com**