

The Safety requirements exemption under the 2024 revised F-gas Regulation

Introduction

The new EU 2024/573 F-gas Regulation introduces stricter product bans with lower GWP-refrigerant thresholds. These ambitious placing on the market prohibitions are accompanied with possible exemptions which apply when required to meet safety requirements at the site of operation. The first relevant exemption may be applied from the first restriction January 1st, 2025, for self-contained refrigeration equipment.

These “safety requirements” are defined in Article 3 of the new F-gas Regulation, and in the Implementing Act 2024/2174 but stakeholders remain with questions on their practical application and enforcement.

EPEE would therefore like to propose to both the European Commission and to national Competent Authorities a practical understanding on how these exemptions would work to ensure that they are applied consistently and workable in practice.

I- General principles on product ban exemptions foreseen by the (EU) 2024/573

1) Definitions

Different stakeholders may be involved in the assessment process for the use of the safety exemption. Below, we therefore provide an overview of the definitions for each of the stakeholders referred to:

- **Equipment manufacturer or importer:** this represents the manufacturer or importer of the RACHP equipment which places the equipment on the EU market;
- **Operator:** as defined in the F-gas Regulation (article 3 (5)), the operator represents the undertaking exercising actual power over the technical functioning of products, equipment or facilities covered by this Regulation, or the owner designated by a

Member State as being responsible for the operator’s obligations in specific cases. This means that in practice, the operator could be the end-user (e.g., for household applications) or the undertaking in charge of operating the equipment (e.g., in commercial buildings, or multi-family housing);

- **Supplier:** this represents the undertaking linking the manufacturer/importer and the installer. The supplier distributes the products from one or several manufacturers.
Installer: this represents the person who installs on site of the operator’s location the RACHP product.

2) Overview of all exemptions linked to product bans

The new F-gas Regulation EU 2024/573 introduces strict rules for placing on the market of products and equipment containing or relying on fluorinated greenhouse gases, while it also includes, several exemptions as described below:

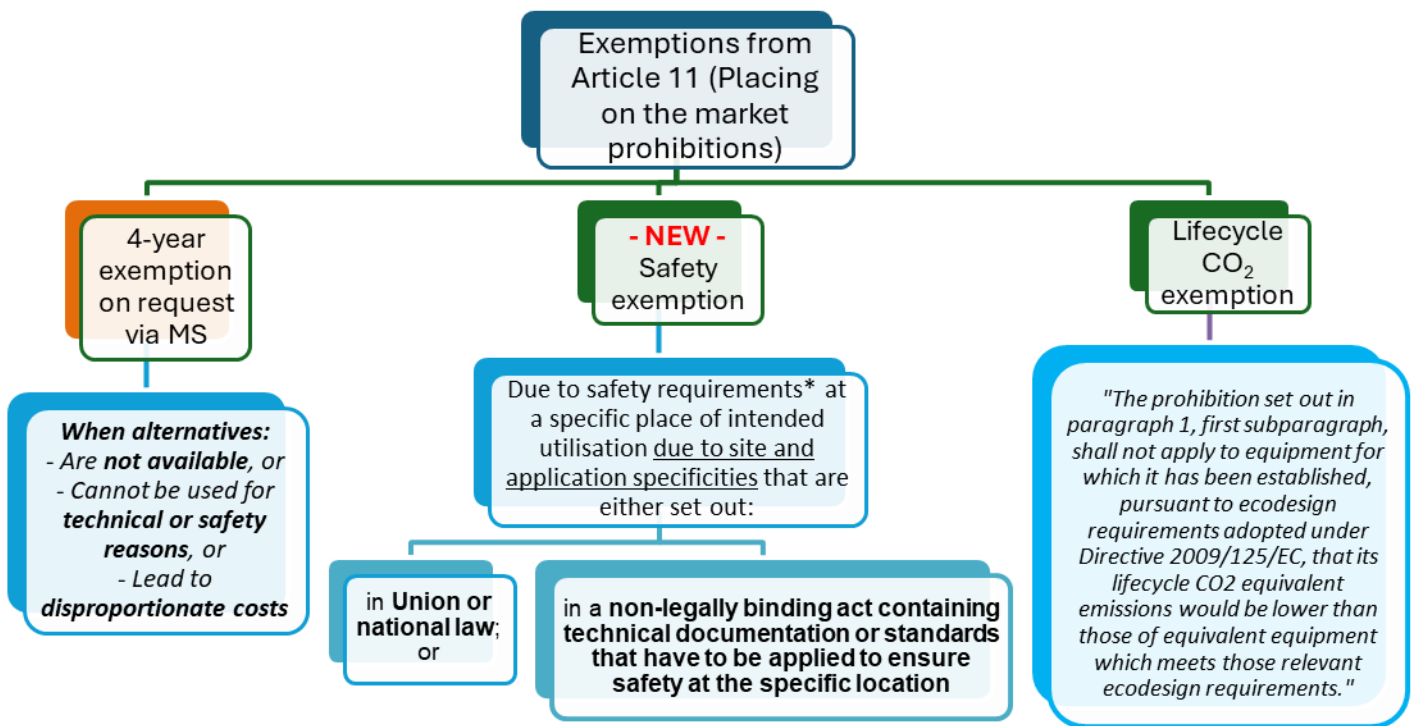


Figure 1 - Overview of the exemptions foreseen by the EU 2024/574



- NEW - exemption which is introduced by the (EU) 2024/573

*Safety Requirement definition according to Article 3 (42) of the (EU) 2024/573: “means requirements on the safety of using fluorinated greenhouse gases and natural refrigerants or products and equipment containing or relying on them, prohibiting the use of certain fluorinated greenhouse gases or their alternatives, including when contained in a product or in equipment at a specific place of intended utilisation due to site and application specificities that are set out in: (a) Union or national law; or (b) a non-legally binding act containing technical documentation or standards that have to be applied to ensure safety at the specific location, provided that they are in accordance with relevant Union or national law”

As mentioned, there are several exemptions, set by the Commission through Implementing Acts, foreseen in view of the placing on the market prohibitions (Annex IV):

Two other time-unlimited exemptions:

- a) An exemption for a product category for up to 4 years upon a substantiated request by a competent authority of a Member State under certain conditions with the possibility to renew.
- b) An exemption for “equipment for which it has been established, pursuant to ecodesign requirements adopted under Directive 2009/125/EC, that its lifecycle CO equivalent emissions would be lower than those of equivalent equipment which meets those relevant ecodesign requirements.”
- c) The **safety exemption**: The safety exemption can be used if safety requirements at the site of installation do not permit the use of systems with fluorinated greenhouse gases or alternatives.

I. Questions and answers about the time-unlimited safety exemption process

1) What is the time-unlimited safety exemption?

The safety exemption can be used if safety requirements at the site of installation do not permit the use of systems with fluorinated greenhouse gases or alternatives.

The safety exemption is only applicable to the product bans in Annex IV where the exemption is explicitly added and which would comply with the particular restriction in question. In the case of RACHP equipment, the safety exemption applies to the following bans: 4, 5(c), 7(b and d), 8(b and e) and 9(b and f).

Safety requirements are defined in Art. 3, point 42, as follows:

(42) ‘**safety requirements**’ means requirements on the safety of using fluorinated greenhouse gases and alternative refrigerants or products and equipment containing or relying on them, prohibiting the use of a certain fluorinated greenhouse gases or their alternatives, including when contained in product or equipment at a specific place of intended utilisation due to site and application specificities that are either:

- (i) set out in **Union or national law**; or

- (ii) set out in a **non-legally binding act containing technical documentation or standards that have to be applied to ensure safety at the specific location**, provided that they are in line with relevant Union or national law.

a. What is meant by Union or national law?

“Union law” covers any European directive or regulation related to safety. This could for example refer to the EU General Product Safety Regulation (EU) 2023/988, the European Product Liability Directive (EU) 2024/2853 or product specific safety acts such as the Low Voltage Directive (EU) 2014/35 and the Machinery Regulation (EU) 2023/1230.

In accordance with EU safety legislation, it is the responsibility of the manufacturer/Importer to place safe products on the market. Manufacturers/importers are obliged to conduct a risk assessment covering the full lifecycle of the product in view of risk minimization. Harmonised standards may be used to show compliance with specific elements of the Regulation. Even though these are not mandatory, equivalent safety measures need to be shown.

Based on this risk assessment, manufacturers/importers specify the boundaries of the installation restrictions in the installation manuals, which the installer needs to follow to ensure that the conditions on which the products have been placed on the market regarding their safe use, such as the safety conditions for safe installation, are being complied with. This may imply that a product cannot be installed in a specific location.

The “national law” covers any national, regional, or local law (all laws included) that limit the use of certain fluorinated greenhouse gases or alternative refrigerants from a safety point of view at the site of installation.

For instance, in France, national-safety regulations are applicable to buildings:

- [Article CH35](#) is applicable for equipment using refrigerants for air conditioning in some public spaces. This article gives indications on the required measures for the use of flammable refrigerants.
- [Article GH37](#) is applicable for cooling and heating production equipment for high-rise buildings. Until now, this article does not authorize equipment with flammable refrigerants for such building type.
From 50 meters in height, residential buildings are considered as IGH.
From 28 metres in height, all other buildings are considered IGH.

Fire safety codes can also be considered as national law. For instance in Italy, the [technical fire prevention standards](#), provides some indications on the use of category of flammable refrigerants for air-conditioning and conditioning systems (see S.10.6.10),

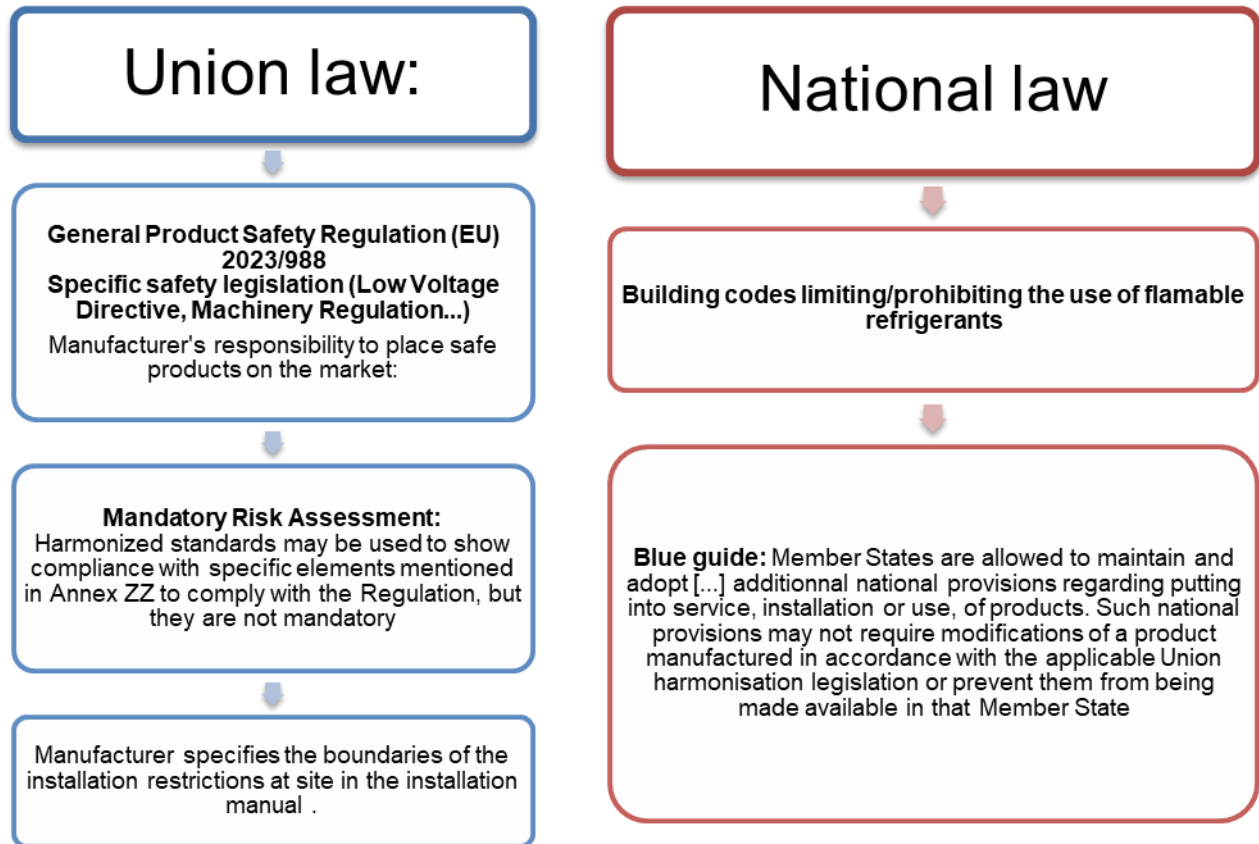


Figure 2 - Meaning of Union and National Law

b. What is meant by non-legally binding act containing technical documentation or standards that have to be applied to ensure safety at the specific location?

“Non legally binding acts” are not Union or national law as described in the point 3 but may include the following:

- Published refrigerating system safety standards;
 1. For instance, the international standard IEC 60335 part 2-40 explains the safety requirements for electrical heat pumps, air-conditioners, and dehumidifiers for household and similar electrical appliances.
 2. The latest version of European standard EN 378:2016 concerns safety and environmental requirements for the design, manufacture, construction,

installation, operation, maintenance, repair and disposal of refrigeration systems and appliances with regard to local and general environments.

- Limitations on locations contained in standards/technical documentation (that may apply for example to train stations, airports, data centres etc,) and based on application specification requirements.
- OHSAS (occupational health and safety assessment)
- Third party risk analysis

2) To which life cycle stages of the equipment does the safety exemption apply to?

The safety exemption in the F-gas Regulation is only referring to the limitations ‘at the site of installation.’

Other life cycle phases beyond installation and product use (such as transport or end of life) cannot be used as a ground to benefit from the exemption.

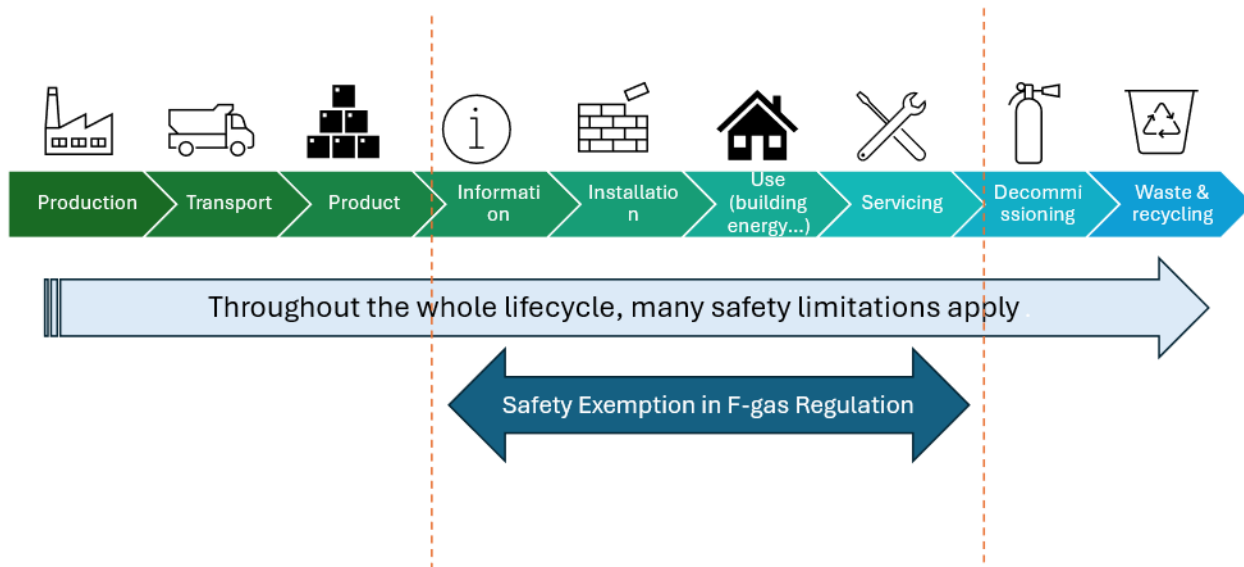


Figure 3 - The Safety exemption application during the lifecycle stages of the equipment

3) What should prevail when a customer wants to install a RACHP equipment?

Customer choice must be respected as long as it is technically feasible and safe. For instance:

- If the consumer asks to install a rooftop unit, he should not be forced to shift towards a chiller with Air Handling Units.

4) Is the safety requirements clause a general or a case-by-case exemption?

The derogation related to the safety requirements is specific for the location where the equipment is used and cannot be used as a general exemption for a product category, i.e. the safety exemption applies to the configuration {*product + refrigerant + site of installation*}.

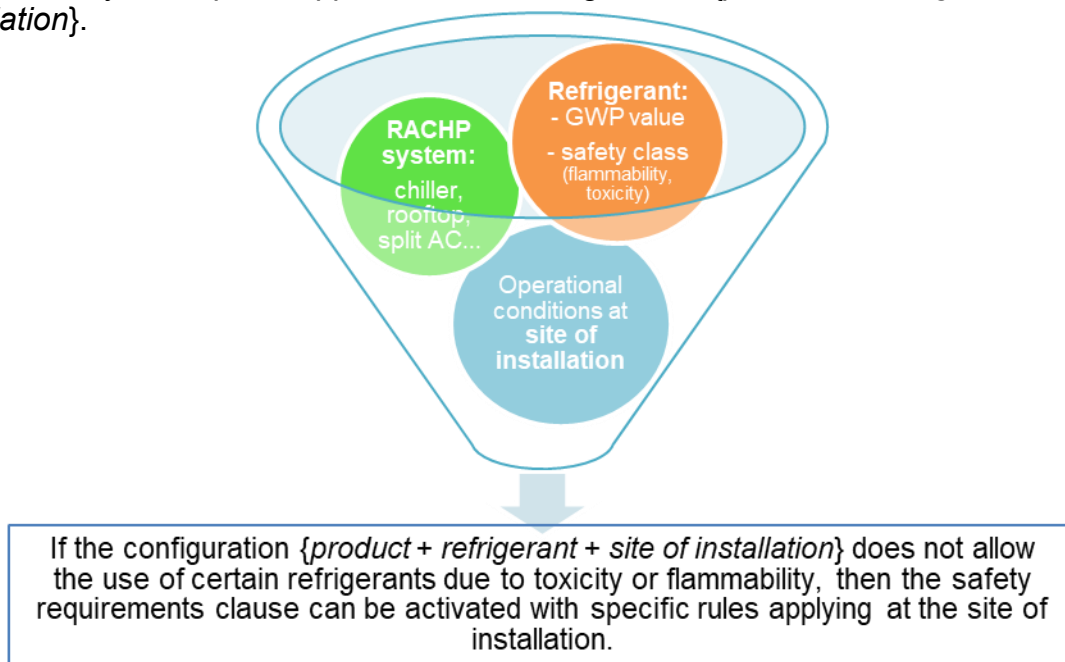


Figure 4 - Parameters to consider in order to apply a safety requirements exemption

The derogation is to be used on a **case-by-case basis** at the site of installation and is not a general exemption for a full product category.

5) Does the exemption require pre-approval for being used?

The use of the exemption does not require prior notification or authorisation to be granted by the authorities.

The proposed Implementing Act on label format stipulates that the product:

- should be accompanied by a statement on the label to indicate that this product is *“Prohibited to be operated unless required by safety requirements that must be applied at the site of operation,”* and
- should be complemented by a reference to the safety requirement:
 - either placed on the label by the manufacturer
 - or if it is not possible to specify the reason prior to placing on the market of the equipment by allowing space to let the supplier or where applicable, the installer or operator, indicate the specific reason for using the safety exemption at the site of installation.

6) Which responsibilities for which stakeholders?

a. Manufacturer

In accordance with EU safety legislation, it has always been the responsibility of the manufacturer/importer to place safe products on the market. In case of installations of components by different manufacturers, the installer is considered as the manufacturer according to the EU definition.

To ensure the safety of its products, the manufacturer needs to carry-out a risk assessment of its equipment (which may be but is not required to be based on available [harmonised standards](#) which can be used to demonstrate compliance with specific requirements).

Original Equipment Manufacturers may also make use of state-of-art international standards in their risk assessments, i.e. IEC 60335-2-40 Edition 8. State-of-the-Art international and European standards should be added here in addition to harmonised standards. Nevertheless, in case manufacturers use non-harmonised standards, they are losing presumption of conformity and have an increased liability. Manufacturers cannot be forced to accept increased liability.

Based on the manufacturer’s internal assessment of safety risks*, the manufacturer will specify the boundaries of the installation restrictions at site in the installation manual.

This assessment represents the manufacturer's own judgement for his technical solution and is among others a factor to be considered by operators and installers when considering the legality of a location specific use of the safety requirements exemption. This manual shall be available for the installer when he needs to install the product.

b. Installer

It is the responsibility of the installer, who needs to hold an F-gas certificate for installing, to only install equipment using refrigerants with higher GWP in the case where the installation of equipment allowed by the regulation is not possible for safety reasons (Cf. definition point 2). The installer is responsible for the proper installation of the equipment.

The installer is obliged to follow the instructions in the safety manual provided by the manufacturer. This is also specified in CEN/TS17606, which provides technical information for the installation of RACHP equipment containing flammable refrigerants, and states that *'equipment shall be installed according to manufacturer's instructions or according to an alternative approach. In the case of the latter, the installer assumes the responsibility as the manufacturer of the assembly.'*

The installer has an important role to advise and support the operator by providing and establishing the evidence showing that the equipment was put into operation in order to respect specific safety requirements.

c. Operator

The operator is responsible for keeping the evidence resulting in the application of the safety exemption in order to share them with the authorities upon their request.

7) How this exemption can be controlled?

In order to ensure this exemption is fairly used, Authorities may request evidence for the use of the safety requirements clause; in that case, the burden of proof lies with the operator of the system, who needs to keep documentation establishing the evidence for at least five (5) years. That is why the installer or the design-engineer play an important role to provide the operator during the installation of the equipment the documents and any evidence justifying the need for using alternative refrigerants at the site of installation of the equipment.

Following a risk-based approach, national authorities must perform market surveillance to ensure the safety exemption is used lawfully by the operator to ensure a level playing field for the industry.

8) Which labelling obligations for the exemption from placing on the market prohibitions apply?

The Commission recently adopted and published the final updated Implementing Act for F-gas label formats: [\(EU\) 2024/2174](#). In the EU Official Journal.

Equipment placed on the EU market using the safety requirements' exemption will need to be labelled accordingly. The manufacturer will need to add in a dedicated space on the label the following statement to explain the equipment is placed on the market in case of safety requirements:

'Prohibited to be operated unless required by safety requirements that have to be applied at the site of operation'

The label will also need to provide space on the label for specifying the applicable safety requirement, either:

- The manufacturer specifies on the label of the equipment, prior to its placing on the market, the reference to the applicable safety requirement that would make its use necessary,
- Or, if not possible to specify it prior to the placing on the market, a blank space should be left for the supplier or, where applicable, the installer or operator to complete it with this specification to be put on the label, prior to putting the equipment into operation.

For the addition of information added in-the-field by the installer or operator a method to ensure that the additional information is “durable for the operational lifetime of the product” will need to be established.

In addition, installers or operators will need to be advised and informed on how to add the information so that it is durable.

About EPEE:

The European Partnership for Energy and the Environment (EPEE) represents the refrigeration, air-conditioning and heat pump industry in Europe. Founded in the year 2000, EPEE's membership is composed of over 50 member companies, national and international associations. Together they represent over 30 billion euros in turnover, over 200,000 direct jobs and millions of indirect jobs. Please see our website for further information: www.epeeglobal.org.