

Julabo

THE TEMPERATURE CONTROL COMPANY

F-gas Regulation

JULABO Guide



What is the F-gas Regulation?

The F-gas Regulation is an EU regulation to control systems containing specific greenhouse stimulating hydrofluorocarbons (HFCs). The new F-gas Regulation was published on June 9th, 2014 and has been effective since January 1st, 2015. The regulation governs that systems such as air conditioning and refrigeration units and fire extinguishing systems using certain gases must be logged and checked periodically for leakage. The new F-gas Regulation does not show filling volumes in kg but assesses the refrigerants according to their Global Warming Potential (GWP).

Specific content:

Until 31.12.2016

Systems containing less than 3 kg fluorinated greenhouse gases, or hermetically sealed systems with less than 6 kg of fluorinated greenhouse gases do not need to perform leakage tests.

From 1.1.2017

Systems using a refrigerant with a CO₂- equivalence between 5 tons and 50 tons require a leakage test every 12 months. This test is the responsibility of the operator.

From 1.1.2020

Refrigerants with GWP greater than 2500 must not be used in systems where the lowest temperature is greater than -50 °C. The usage of these refrigerant in systems with the lowest achievable temperature lower than -50 °C is still possible.

Validity

The F-gas Regulation is valid in all countries of the European Union. All products sold within this region must fulfill these regulations.

F-gases

F-gases (fluorinated gases) are synthetic gases that can stay in the atmosphere for centuries and contribute to global warming. The most common F-gases are hydrofluorocarbons (HFCs), which contain hydrogen, fluorine, and carbon. They are used in a multitude of applications including commercial refrigeration, industrial refrigeration, air-conditioning systems, heat pump equipment, and as blowing agents for foams, fire extinguishers, aerosol propellants, and solvents.

F-gas Regulation goal

This regulation aims to limit the rise in the worldwide temperature to 2 °C to avoid undesirable environmental impacts. With this, the industry's CO₂ emissions should be reduced by 73% from year 1990 to year 2030.

To achieve this goal the estimated CO₂-equivalent of 104 million tons in the year 2013 must be reduced to appr. 35 million tons .

JULABO Activities

Repairs and leakage tests by JULABO specialists

JULABO service personnel have been trained for many years according to (EG) No. 303/2008 and are therefore qualified to perform repairs and leakage tests with the highest environmental standards.

New JULABO products fulfill the F-gas Regulation

New developments by JULABO will fulfill the F-gas Regulation and use compliant refrigerants.

JULABO products meet the highest safety standards

User safety is extremely important for JULABO. Precisely for this reason JULABO products use only the safest possible refrigerants.

JULABO Service

Leakage tests

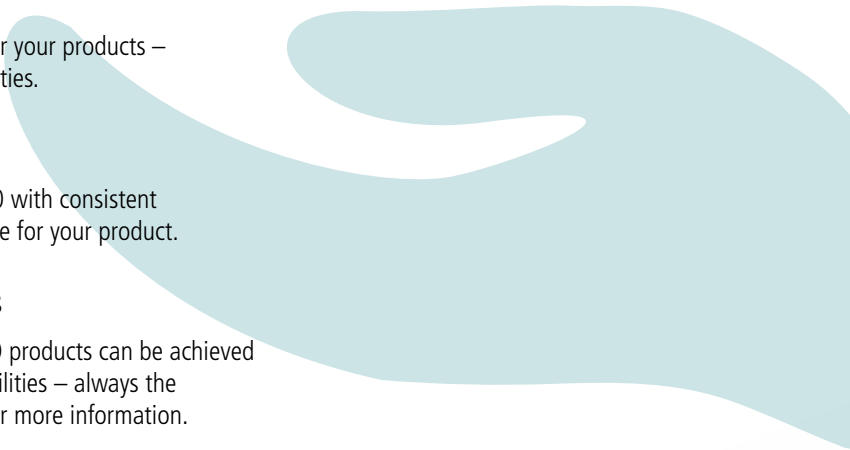
JULABO certified engineers perform annual leakage tests for your products – We are able to offer this service both on site and at our facilities.

Maintenance and repair

JULABO products can be maintained and repaired after 2020 with consistent performance specifications. JULABO Service is the right choice for your product.

Maintenance contracts for JULABO products

Minimum down-time and the highest safety for your JULABO products can be achieved with JULABO maintenance contracts. We offer several possibilities – always the best solution for your product. Contact JULABO specialists for more information.



FAQ F-gas Regulation

When is it required to do a leakage test?

Systems using a refrigerant with CO₂-equivalence between 5 tons and 50 tons require a leakage test every 12 months. This test has to be ensured by the operator of the system.

Is it possible to repair and maintain JULABO products after the year 2020?

The filling volume of all JULABO products lies below the 40 tons CO₂-equivalent (10.2 kg R404A) which marks the maximum permissible value effective in the year 2020. Subsequently JULABO products are not affected and can be repaired and maintained with consistence performance specification. Facilities and products with the lowest temperature < -50 °C are excluded from this regulation.

Why is propane not used as a refrigerant in JULABO products?

Julabo products are manufactured to the highest possible safety specifications. JULABO does not use propane as a refrigerant except in a few highly specific products. Propane is a highly flammable refrigerant which leads to reduced operator safety and furthermore because of hazardous goods declarations there are restrictions regarding transportation.

Which products are covered by the F-gas Regulation?

The F-gas Regulation covers all refrigeration units that use a refrigerant with a GWP > 2500.

What does GWP mean?

The Global Warming Potential (GWP) of a chemical compound is a measure of the relative effect of this chemical's contribution to the greenhouse effect, i.e. global warming.

What does CO₂-equivalent mean?

The CO₂-equivalent of the system is the product of the GWP of the refrigerant multiplied by the filling volume in the respective system.

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