

# HFC-125

- Discharge time: 10 seconds
- No residue to clean up after the discharge
- Electrically non- conductive
- Zero Ozone Depletion Potential
- Included in ISO 14520, UNE 23571 and NFPA 2001 Standards

HFC-125 is physically similar to Halon 1301, thus it is an excellent and efficient alternative with the advantage that it does not deplete the ozone layer. It is suitable for use as extinguishing agent in total Flooding systems in occupied areas for the protection of property such as: computers, archives, electrical equipment and telecommunication equipment, among others.

Studies carried out in accordance with PBPK model (physiologically based pharmacokinetic model), included in NFPA 2001, have shown that persons exposed to HFC-125 for a maximum period of 5 minutes and concentrations up to 11,5% v/v, do not produce an HFC-125 level in the blood associated with cardiac sensitisation. Due to its low boiling point it is also suitable for use with low temperatures.

HFC-125 is a colourless, odourless and non-conductive gas. It extinguishes fires by absorbing heat and does not leave residue to clean up after the discharge.

LPG design concentration for HFC-125 systems is 9.8%, discharge time within 10 seconds. Discharge is performed through valves fully developed by LPG, approved by the most renowned independent organizations.



A technically advanced solution



Loss Prevention  
Certification Board



Agencia Protección Contra  
Incendios  
Ministerio del Interior



They offer a great flexible adaptability for all actuation and release systems currently used in the market, even allowing combinations of several of them.

The design of the system protects against accidental actuation due to any small leak. They also allow checking and maintenance of all critical elements contained in a fixed extinguishing system, at the time of commissioning and later for system preventive maintenance, thus preventing the risk of accidental discharge.

All LPG valves possess type registration by Ministry of Industry in compliance with a compulsory standard.

LPG fire extinguishing systems include discharge nozzles specially designed to enhance the properties of the extinguishing agent 360° nozzles are both available for HFC-125.

A system may be modular or centralized. Individual cylinders, located near the hazard to be protected, form modular systems. Centralized systems are formed by a cylinder bank, which may be fitted with selector valves for the protection of several hazards.

LPG quality assurance system ensures complete traceability of all components used in its fire extinguishing systems.

## Physical Properties

Chemical name:	Pentafluoroethane
Chemical formula :	$CF_3CHF_2$
Compliance with ISO 14520 and NFPA 2001:	HFC-125
Molecular weight :	120.0
Boiling point at 1.013 bar:	- 48.3° C
Liquid density at 25° C:	1189.7 kg./m <sup>3</sup>
Critical temperature:	66.3° C
Critical pressure:	35.95 bar abs
Vapour pressure at 20° C:	12.09 bar abs
Relative electrical resistance at 1atm. 21° C (N <sub>2</sub> =1.0):	0.955
Max. filling density:	0.93 kg./l.
Design concentration for heptane :	9.8%
Flooding factor for heptane at 20° C:	0.648 x 1.2 kg./m <sup>3</sup>
Design concentration for class A surface fires (ISO):	11.3%
Flooding factor for class A surface fires (ISO):	0.485 x 1.2 kg./m <sup>3</sup>
NOAEL:	7.5%
LOAEL:	10%
Ozone depletion potential:	0
Greenhouse effect potential:	2800
Approvals and recognitions :	EPA, NFPA