- **Natural Gas present in the atmosphere**
- **Design in compliance with ISO 14520, UNE 23575, NFPA 2001 and CEA 4008**
- **Suitable for occupied areas**
- **Electrically non-conductive**
- **No residue to clean up after fire**
- **Low refilling cost**
- **Zero Ozone Depletion Potential**
- **No greenhouse effect**
- **No decomposition products**

The natural extinguishing agent

ARGON 200

Argon is an inert gas naturally present in the atmosphere, therefore its greenhouse effect is nil and its ozone layer depletion potential is zero. It is chemically inert, non-conductive, colourless, odourless and flavourless. Argon is noncorrosive and may be used at normal temperatures with such materials as nickel, steel, stainless steel, copper, brass, bronze and elastomer plastics.

Argon extinguishing systems are based in the principle of reducing the oxygen concentration inside the protected hazard. The oxygen concentration is minimized by the application of Argon until it reaches a level where combustion is no longer supported. Each system is designed so as to decrease oxygen to a specific level. When discharged, Argon is quickly and uniformly distributed within the enclosure, achieving design concentration in 60 seconds. Discharge is through valves fully developed by LPG, approved by

the most renowned independent organizations. They offer a great flexible adaptability for all actuation and release systems currently used in the market, even allowing combinations of several of them. Incorporated in the design is a protection against accidental actuation due to small leakages. 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. As a general rule, extinguishing concentration is achieved when oxygen contents in the air is reduced from its usual level of 20,9% to lower values of 15%, depending on combustible.

Argon is stored in high-pressure cylinders in the form of compressed gas, thus space required for such cylinder storage depends on pressure and capacity. Argon 200 fire extinguishing systems are designed for a cylinder filling pressure of 200 bar. LPG cylinder capacities are 80, and 140 lt., saving in space and money.

Although the method Argon systems use to extinguish fires is the same as the method used by CO_2 (reduction of oxygen concentration within the hazard), Argon is safe for use in occupied areas and excellent visibility is maintained during discharge.

Argon is ideal for the protection of archives, museums, libraries and any other hazard including valuable or unique property. Likewise it is suitable for the protection of computer rooms, telephone exchange equipment and any other electrical installation which may present a fire hazard.

LPG is holder of VdS and LPCB certifications for system components and VNIIPO certification for system.

Physical Properties	
Chemical name	Argon
Chemical formula	Ar
Denomination according to ISO 14520 and NFPA 2001	IG-01
Molecular weight	39.9
Boiling point at 1.013 bar	-186 ºC
Critical temperature	-122 ºC
Critical pressure	48.7 bar
Relative electrical resistance at 1 atm. 25ºC (N_2=1.0)	1.01
Maximum filling pressure	200 bar
Design concentration for heptane	48.8%
Flooding factor for heptane at 20ºC	0.647 m^3/m^3
Design concentration for class A surface fires	38%
Flooding factor for class A surface fires	0.478 m^3/m^3
NOAEL	43%
LOAEL	52%
Ozone depletion potential	0
Greenhouse effect potential	0

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