

LPG Inert® IG-01

- Natural gas present in the atmosphere
- Design in compliance with ISO 14520, NFPA 2001 and CEA 4008
- Suitable for occupied areas
- Electrically non-conductive
- No residue to clean up after the discharge
- More economical and less storage space
- Zero Ozone Depletion Potential
- No greenhouse effect
- No decomposition products

LPG INERT® IG-01 (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 non-corrosive and may be used at normal temperatures with such materials as nickel, steel, stainless steel, copper, brass, bronze and plastics.

LPG INERT® IG-01 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** and approved by the most renowned independent approvals 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. The design of the system protects against accidental actuation due to any small leak.



The natural extinguishing agent



VdS
Schadenverhütung
Vertrauen durch Sicherheit



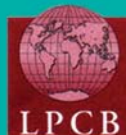
Agencia Protección
Contra Incendios Ministerio
del Interior



Centre National
de Prevention et Protection



VNIPO
Russian Certification Body



Loss Prevention
Certification Board



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 values lower than 15% depending on the combustible products.

LPG INERT® IG-01 is stored in high-pressure cylinders in the form of compressed gas, thus space required for such cylinder storage depends on pressure and capacity. **IG-01** fire extinguishing systems are designed for a cylinder filling pressure of 150 / 200 / 300 bar. **LPG** uses cylinder of 80 lt and 140 lt. capacity thereby, optimizing in space and costs.

Although the method **LPG INERT® IG-01** systems use to extinguish fires is the same as the method used by CO₂ (reduction of oxygen concentration within the hazard), **IG-01** is safe for use in occupied areas and excellent visibility is maintained during discharge.

LPG INERT® IG-01 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 that may present a fire hazard.

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:	-185,9° C
Critical temperature:	-122,3° C
Critical pressure :	49 bar
Maximum filling pressure :	150/200/300 bar
Design concentration for heptane:	51%
Flooding factor for heptane at 20° C :	0.701 m ³ /m ³
Design concentration for class A Fires (NFPA):	38.7 %
Flooding factor for class A Fires (NFPA):	0.481 m ³ /m ³
NOAEL:	43%
LOAEL:	52%
Maximum concentration in a 5' exposure:	43%
Ozone depletion potential:	0
Greenhouse effect potential :	0

HEADQUARTERS

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