

IG 55 INERT GAS

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The Agent

IG55 is a mixture of two naturally occurring atmospheric gases, Nitrogen and Argon.

IG55 is stored compressed and uncondensed and is totally dry. When deployed, there is no condensation that can cause harm to moist sensitive equipment.

IG 55 does not form harmful by products when used in a fire and the gas is totally non corrosive. The gas is stored and used at room temperature, thus avoiding any risk of damage due to exposure to low temperatures.

IG55 does not affect the ozone layer and has a very short atmospheric lifetime. IG 55 has no global warming potential.

IG55 is colour- and odour-less. IG 55 is non conductive. IG 55 has approximately the same density as air.

The oxygen depletion method

IG55 is used in closed areas -total flood. IG55 extinguishes the fire by depleting the oxygen level down to where no combustion can occur. Normal air contains 20,9% of oxygen. In order to put out a fire that level must be reduced down to 14% or less. At a concentration of 50% IG55 in a room, a typical oxygen level of 12,5% is achieved.

IG55 is suitable for fires in gases and liquids, class B-fires. IG55 is also suitable for putting out class A surface fires in wood, cloth and paper.

IG 55 is not suitable for fires in substances that generates oxygen, like some reactive metals.

IG55 is a mixture of Nitrogen and Argon that extinguishes fire by oxygen depletion.

Because the reduced oxygen atmosphere required to put out the fire still is breathable to humans, IG55 is ideal to use in normally occupied areas

IG55 is clean and pure and leaves no residues that has to be taken care of after discharge. The gas is non corrosive and non conductive and can be used directly on electrical installations.

Personal safety

In order to put out a fire the oxygen level must be reduced down to 14% or less. A normal system is dimensioned to reduce the oxygen level down to 12-13,8% depending on the type of hazard. This is a level that is considered safe for normally occupied areas, and the system may be used without restrictions like time delays and pre alarms.

Name	IG55 (50/50)
Chemical composition	nitrogen, 50% argon, 50%
Specific volyme	0.708 m ³ /kg
Density at 20 °C (density of air at 20 °C)	1.41 kg/m ³ (1.20 kg/m ³)

Storage

IG55 is stored in high pressure cylinders at 300 bars.. Sizes range from 50 to 80 litres. Because of the high storage pressure, it is important that all used equipment like pipes, manifolds, hoses etc. are specified for the actual pressure and firmly secured and clamped.