IG-541 is an inert gas which is also commonly known by the brand name INERGEN. The composition of the gas is 50% Nitrogen, 42% Argon and 8% Carbon Dioxide the green house effect and ozone depletion characteristic of the gas is nil. The gas is chemically inert, colourless, odourless, flavourless, non conductive and non corrosive. At normal temperatures it may be freely used with such materials as nickel, stainless steel, copper, brass, bronze and plastics.

IG-541 extinguishes fire by reducing the oxygen concentration within the protected enclosure below the level at which fire is sustainable. At this level the atmosphere is still breathable and therefore at the concentrations used the gas is safe for use in occupied areas.

The extinguishing systems using IG-541 are designed to reach their design concentrations within 60 seconds of discharge. They should always be accompanied by properly carried out integrity testing of the enclosure to ensure that the design concentration can be maintained while at the same time incorporating pressure relief venting. They provide an excellent solution to fire protection requirements for areas such as clean rooms, computer rooms, critical control rooms, substations, generator enclosures and numerous other applications where fire protection is required without the risk of water damage.

Chemical name	IG-541
Chemical Formula.	Ar, N2, CO2
Molecular weight 34.0	
Boiling point at 1.013 bar -196	
Design concentration class A	39.9%
Design concentration Higher	
Hazard class A	45.7%
NOAEL	43%
LOAEL	52%
Greenhouse effect.	0

I.S. 3218:1989 FIRE ALARMS
1.76.002

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