PROINERT® IG-55 EXTINGUISHANT

Data Sheet

DESCRIPTION

IG-55 is a colorless, odorless, electrically non-conductive gas with a density approximately the same as air. (see Physical Properties Table below for additional information).

IG-55 is stored as pressurized gas within the cylinder assembly. When discharged into a protected space, IG-55 is clear and does not obscure vision. It leaves no residue and has zero ozone-depleting potential and zero global-warming potential.

APPLICATION

Fike ProInert systems use IG-55 inert gas as the extinguishing media as specified in NFPA 2001. IG-55 is an inert gas mixture consisting of 50% argon and 50% nitrogen. IG-55 can be used as a total flooding fire suppression agent protecting hazards against most flammable substances. IG-55 extinguishant is particularly useful where an environmentally acceptable fire extinguishing system is essential, where an electrically non-conductive medium is needed and where people-compatibility is necessary. IG-55 extinguishant can be used to protect a wide range of applications from sensitive electrical equipment to industrial applications using flammable liquids.

PERFORMANCE

IG-55 extinguishes a fire by reducing the residual oxygen concentration to a level that will no longer support combustion. IG-55 must be used in total flooding applications where the protected hazard is enclosed, or for protection of equipment that is self-enclosed in order to maintain the agent after discharge.

Because IG-55 does not decompose when extinguishing a fire, there are no toxic or corrosive decomposition products created, other than those that may have been released due to the effects of the fire on the materials within the enclosure. The normal residual oxygen value in an occupied space is 20% by volume. The lowest residual oxygen limit acceptable for personnel occupancy over a short period of time is 10%. After discharge of a typical IG-55 total flood system, the resulting residual oxygen level will be between 10% and 15% by volume. While these residual oxygen levels will not support combustion of most fires, personnel within the space will still be able to breath normally. This will allow sufficient time for egress, provided that there are no harmful decomposition products from the materials affected by the fire.

IGG-55 PHYSICAL PROPERTIES

Description:	**IG-55**
Chemical Name	N_2/Ar
Molecular Weight	33.95
Boiling Point at 760 mm Hg	-310.2°F (-190.1°C)
Critical Pressure	602 psia (4,150 kPa)
Critical Temperature	-210.5°F (-134.7°C)
Relative Density compared to air	1.18

PROINERT DESIGN CONCENTRATIONS

Class	**Minimum Design Concentration NFPA 2001**
A	34.2 %
B	45.5% (n-Heptane)
C	34.2%

APPROVALS

- U.L.
- F.M.
- U.L.C.

Form No. C.1.43.01-2

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Form No. C.1.43.01-2 April, 2010 Specifications are subject to change without notice.

U.S. Patent 6,871,802 and Foreign Patents