

PROINERT® IG-100 AGENT

GASEOUS SUPPRESSION SYSTEM



Fike®

Product Overview

IG-100 is a colorless, odorless, electrically non-conductive gas with a density approximately the same as air. (see Physical Properties for additional information).

IG-100 is stored as pressurized gas within the cylinder assembly. It is available at storage pressures of 200 bar and 300 bar. When discharged into a protected space, IG-100 is clear and does not obscure vision. It leaves no residue and has zero ozone depleting potential and zero global warming potential.

Extinguishing Method IG-100

IG-100 extinguishes a fire by reducing the residual oxygen concentration to a level that will no longer support combustion.

APPROVALS

LPCB Approved Certification Number 654a

FEATURES & BENEFITS

- Natural gas present in the atmosphere
- Suitable for occupied areas
- No toxic or corrosive decomposition products from agent
- Colorless, odorless, compressed gas
- Stored as a gas
- Fogging does not occur when agent is discharged
- Electrically non-conductive
- No residue to clean up after discharge
- Zero ozone depleting potential
- Zero global warming potential
- Included on the U.S. EPA Significant New Alternative Policy (SNAP) rules

APPLICATIONS

- Data centres
- Computer rooms
- Telecommunications facilities
- Switchrooms
- Power generator facilities
- Flammable liquid storage rooms
- Machinery spaces

USE & LIMITATIONS - IG-100 AGENT

Prolnert system shall be used on the following Class of Hazards:

Class A & C: Electrical and Electronic Hazards
Telecommunications Facilities
High value assets, where the associated down-time would be costly

Class B: Flammable liquids and gases

Prolnert systems shall "NOT" be used on fires involving the following materials:

Class A & C: Chemicals or mixtures of chemicals that are capable of rapid oxidation in the absence of air.
(Examples include: Cellulose Nitrate and Gunpowder)
Reactive metals such as Lithium, Sodium, Potassium, Magnesium, Titanium, Zirconium, Uranium, and Plutonium

Class B: Metal hydrides such as Sodium Hydride and Lithium Aluminum Hydride
Chemicals capable of undergoing auto-thermal decomposition.
(Examples: Organic Peroxides and Hydrazine)

PHYSICAL PROPERTIES - IG-100 AGENT

ASHRAE Designation:	IG-100
Chemical Name:	N2 (Nitrogen)
Molecular Weight:	28
Boiling Point at 760 mm Hg:	-195.8°C (-320.4°F)
Critical Pressure:	3,399 kPa (492.9 psia)
Critical Temperature:	-146.9°C (-232.4°F)

EXPOSURE LIMITATIONS

Hazard Types	Design Concentration / Oxygen Levels	Maximum Human Expose Time
Normally Occupied Space	Up to 43% / 12% minimum	5 minutes
	43% to 52% / 12% to 10%	3 minutes
Normally Un-Occupied Space	52% to 62% / minimum 8%	30 seconds
	Above 62% / 8% or lower	0 seconds (Personnel CANNOT be exposed)

NOTES: EN 15005, ISO 14520 & NFPA 2001 does not allow Clean Agent Systems to be used in any occupiable spaces where the design concentration required is above 52% unless provided with supervised system lockout valve, pneumatic pre-discharge alarm, pneumatic time delay and warning signs. Fike does not recommend Prolnert systems to be used in normally occupied spaces where the design concentration required is above 52%..

WARNING: The discharge of clean agent systems to extinguish a fire can result in potential hazard to personnel from the natural form of the clean agent or from the products of combustion that result from exposure of the agent to the fire or hot surfaces. Unnecessary exposure of personnel either to the natural agent or to the products of decomposition shall be avoided.