

NATURA™ Inert Gases

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Four Choices. Environmentally Safe. Naturally Occurring.

The NATURA™ Inert Gas System offers four NFPA-specified and ISO-approved agents, each suited for different environmental conditions and local recharge availability. All four are non-toxic, non-conductive, and leave no residue.

Choosing the right Inert Gas

IG-100 Economy & Maintenance (The "Value" Choice)

Select IG-100 (100% Nitrogen): Choose this for the lowest total cost of ownership. It is the most economical to install and the easiest to refill globally. Because it closely matches the density of air, it is also the best choice for rooms that are difficult to seal, as it has the lowest leak rate.

IG-55 Performance Balance (The "Standard" Choice)

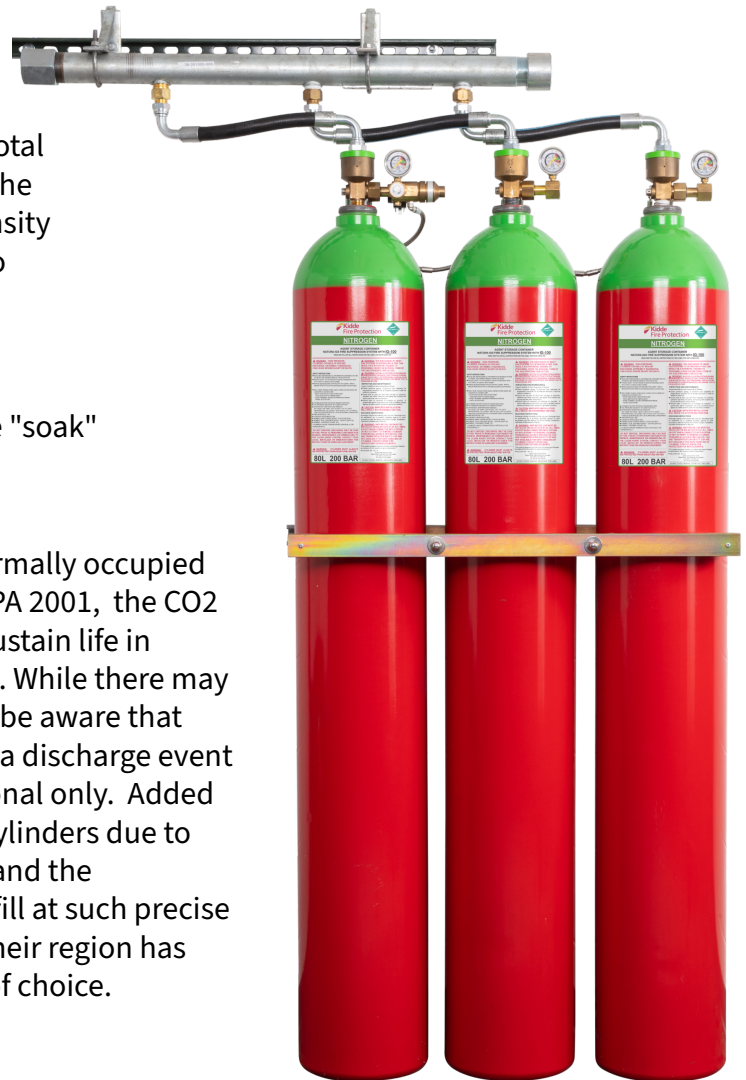
Select IG-55 (50% Nitrogen, 50% Argon): Choose this for a "best-of-both-worlds" approach. It provides a more stable "soak" than pure nitrogen while still keeping refill costs moderate.

IG-541 Personnel Safety (The "Occupied Space" Choice)

Select IG-541 (52% N₂, 40% Ar, 8% CO₂): Choose this for normally occupied rooms like control centers or busy offices. According to NFPA 2001, the CO₂ in IG-541 promotes breathing characteristics intended to sustain life in oxygen-deficient environments for protection of personnel. While there may be some benefit to this choice, specifiers and users should be aware that codes and standards require personnel to evacuate before a discharge event and therefore the 'benefit' of using this blend may be notional only. Added to this is the potential for difficulty in refilling discharged cylinders due to the very precise tolerances required by agencies to certify and the corresponding reluctance of fillers to not just blend but to fill at such precise tolerance levels. Specifiers and users should ensure that their region has the ability to fill and refill before making IG-541 the agent of choice.

IG-01 Specialty Risk (The "Technical" Choice)

Select IG-01 (100% Argon): Choose this specifically for Class D combustible metals (like titanium or magnesium) or for sub-floor protection. Because it is significantly heavier than air, it "pools" at the lowest point, making it perfect for raised floors in data centers.



IG-100 (100% Pure Nitrogen)

The Winning Solution

The Agent: IG-100 (100% Nitrogen)

Selected as the most economical and widely adopted choice due to the low cost and high global availability of nitrogen. Its neutral buoyancy (density nearly identical to air) ensures the lowest room leak rate, providing the longest possible protection duration even in less-than-airtight enclosures.

Storage: 140L High-Pressure Cylinders

Utilizing the larger 140L cylinder capacity at 300 bar reduces the total system footprint by up to 40% compared to standard 80L tanks, saving valuable floor space in the data hall or cylinder room.

Maintenance: A periodic Proof of Performance

Configuration allows for system validation and integrity testing without an actual agent release. By utilizing the NATURA™ Series 400 Valve, with its discharge indicator you can periodically verify the functional performance of the full detection and control system circuitry and the operation of the suppression system without downtime or the expense of a full discharge.

Data Centers:

Acoustic Protection: UL-Listed Silent Nozzles

Kidde Fire Systems Acoustic Nozzles are engineered to keep discharge sound pressure levels below 110 dB. This is a critical safeguard for high-density hard disk drives (HDDs), which are susceptible to data loss or physical damage from the vibrational energy of a standard high-velocity gas discharge.

Performance: 120-Second Discharge Profile

While standard Class B fires require 60 seconds, Class C allows for a 120-second discharge time to minimize peak pressure in the hazard space. This "gentler" discharge allows for smaller vents to maintain room integrity and prevent structural stress on the data center's partitions.



Acoustic Nozzles

Why NATURA™ IG-100 Nitrogen Wins

The Kidde Fire Systems NATURA™ IG-100 configuration provides for a very cost-competitive Total Cost of Ownership (TCO) over the lifetime of the system. Your system is backed by a 100+ year legacy of high-quality field-proven products and installed by factory trained and qualified Engineered Systems' Integrators. Additionally, the NATURA™ platform allows for reduced cylinder count and a testing protocol that proves system operation without ever wasting a drop of agent. And the agent? Nitrogen – the most economical of the four NFPA specified inert gas options.

In sharp contrast to some other suppliers, our solution goes beyond stand-alone suppression hardware, and includes a full and comprehensive selection of Kidde Fire Systems branded prevention-detection-control AND suppression system products:

- Air sampling early warning detection
- REL-iON™ sensors
- AEGIS™-PHX control unit and associated conventional detection
- ARIES®-SLX and ARIES®-MLX control units and associated addressable intelligent SmartOne® detection
- IntelliSite™ cellular-based, remote monitoring systems

We offer one-stop-shop single-point of responsibility for your entire special hazard application. For you this means ideal protection and peace of mind.

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