

End User FAQs
(Frequently Asked Questions)



**INERGEN Clean Agent
Fire Suppression System**

<p>What is INERGEN fire suppression agent?</p>	<p>INERGEN agent is used in engineered clean-agent, fire suppression systems utilizing a fixed nozzle agent distribution network with a total flooding application.</p> <p>INERGEN agent is a mixture of three naturally-occurring gases: 52% nitrogen, 40% argon, and 8% carbon dioxide.</p>
<p>How does INERGEN agent work to suppress a fire?</p>	<p>INERGEN agent suppresses surface fires in Class A, B, and C hazards by lowering the oxygen content below the level that supports combustion while helping to maintain a life-safe atmosphere.</p>
<p>Is INERGEN agent safe for discharge in an occupied area?</p>	<p>Yes, however, NFPA 2001 requires occupants to exit the area, primarily because of potential by-products from the burning substance.</p> <p>Unlike other inert gas agents, INERGEN agent includes a small percentage of carbon dioxide. For the protection of personnel, the carbon dioxide greatly enhances the breathability of the INERGEN atmosphere for sustaining life in the reduced oxygen environment.</p>
<p>What differentiates INERGEN agent from chemical clean agents?</p>	<p>As INERGEN agent is derived from gases present in the earth's atmosphere, the agent exhibits the following:</p> <ul style="list-style-type: none"> • No ozone depleting potential • Does not contribute to global warming • Does not contribute chemical compounds with extended atmospheric lifetimes <p>Because INERGEN agent is composed of gases that do not undergo chemical decomposition when exposed to heat, the agent does not cause the problem of acidic gas production often associated with chemical agents.</p>
<p>How many cylinders are in a typical system?</p>	<p>Systems range from one to several cylinders depending on the size of the hazard area(s).</p> <p>To accommodate different floor plans, cylinders may be located in the hazard area or outside the area in a remote location.</p>
<p>Can more than one hazard be piped from a single system?</p>	<p>Multiple hazards can be protected with one bank of cylinders using selector valves.</p>

How are INERGEN systems actuated?	System actuation can be accomplished through manual, pneumatic or electrical means. Automatic electrical actuation is achieved through the use of an AUTOPULSE control unit.
Will an INERGEN agent discharge over-pressurize the protected room?	As with any clean agent system, all installations must be provided with proper pressure relief venting in accordance with the guidelines provided in the ANSUL Design and Installation Manual. This will help to eliminate any over or under-pressurization of the room.
Does INERGEN agent cause damage to hard drives in data centers?	<p>High decibel levels with high frequency content have been found to disrupt HDD performance.</p> <p>The mere introduction of INERGEN agent into an enclosure containing hard disk drives does not result in degradation of HDD performance.</p> <p>Tyco Fire Protection Products (Tyco) has indentified installation techniques to minimize disruptive noise generated in a data center environment. For more information, please see our position paper on INERGEN Acoustics Testing (Form No. F-2012029).</p>
Can I keep my data center (or other electronics) up and running during an INERGEN agent discharge?	Because energized electronic equipment is frequently the cause of a fire leading to a discharge, this is not recommended. NFPA 75 Protection of Information Technology Equipment 8.4.2.1 states, "The power to all electronic equipment shall be disconnected upon activation of a gaseous agent total flooding system..."
How often do I need to provide maintenance for my INERGEN system?	Maintenance is a vital step in the performance of a fire suppression system. A system inspection must be performed by an authorized ANSUL distributor at regular intervals, not more than one year apart and cylinder contents should be verified every six months.
What do I do with spent INERGEN agent in the protected space after the fire event is deemed over and the room is ventilated?	Since INERGEN agent is a mixture of atmospheric gases, the spent INERGEN agent simply returns to the atmosphere.

<p>How do I get my INERGEN system back up and running post-discharge?</p>	<p>Your local authorized ANSUL distributor will recharge your INERGEN system and place it back into service.</p>
<p>How much will it cost to replace the agent in the event of a discharge?</p>	<p>Tyco will replace the INERGEN agent for up to 20 years from the date of commissioning the INERGEN fire suppression system. Tyco will pay for the cost of the INERGEN agent, regardless of the cause of the fire suppression system discharge, excluding any system commissioning discharge test and distributor labor. Restrictions apply; refer to INERGEN Evergreen Discharge Warranty (Form No. F-9778).</p>
<p>Will INERGEN agent ever be banned because of environmental impact?</p>	<p>INERGEN agent is protected by a 20-year environmental warranty. For 20 years after the date of installation, Tyco will warrant the INERGEN agent against banning and restriction by a governmental regulatory body for any of the following environmental issues:</p> <ul style="list-style-type: none"> • Ozone Depleting Potential • Global Warming Potential • Atmospheric Lifetime • Agent Decomposition Products <p>Restrictions apply; refer to INERGEN Environmental Warranty (Form No. F-2004122).</p>