



Inergen®

Gaseous fire suppression systems;  
protecting people and the environment



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## Detect and suppress fires before they can even take hold

Inergen® gas is the perfect fire suppression system for enclosed areas. It quickly suppresses fire without further damaging sensitive equipment and does not require a time consuming clean-up of the extinguishing agent afterwards. It is also one of the safest fire extinguishing gases proven to have no ill effects on people or the environment.

Inergen® is the fire suppression system of choice for areas that contain high value or mission critical assets, such as; computer rooms, power generation plants, operating theatres, data recovery centres, museums, libraries and switch rooms. But it is suitable for use in most areas.

### **Swiftly starves fire**

When discharged, it smothers a fire by reducing the concentration of oxygen in the room from the usual 21% to about 12.5%. Most substances will not support combustion below 15% and so fires are quickly extinguished. At the same time Inergen® takes advantage of a proven physiological response in the human body to increase oxygen absorption while in the atmosphere, thus allowing people to exit the area without any ill effects.

Inergen® gas systems are installed in conjunction with a sensitive smoke detection system, able to detect potential fires at the smoke or smoulder stage – even smoke from a source as small as a lit cigarette can be detected. Yet the advanced analysis algorithms keep false alarms to a minimum.

As soon as the detection system confirms a potential fire incident, the Inergen® gas is released. The patented composition of Inergen® gives it a density similar to normal air, so it does not rapidly sink to the floor or escape under doors. It disperses throughout the room quickly and holds its concentration to both extinguish the fire and prevent re-ignition for up to 20 minutes.

Inergen® extinguishing agent does not impact on protected equipment because Inergen® is clean, dry and electrically non conductive. It does not decompose into damaging by-products when it comes into contact with flames or hot metal surfaces. It does not produce toxic or corrosive residue or deposits to clean up after an Inergen® release. In most cases, the normal room ventilation system is sufficient to remove the Inergen® concentration and restore the natural air composition.

*Fact: Inergen® systems detect and suppress fires in seconds – before they can take hold.*

*Protecting People & Property*

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## Effectively overcoming flames, not people

*FACT: Inergen® is made up of naturally occurring gases found in the air we breathe. Thousands of people have experienced Inergen® through test and actual discharge.*

### **Tough on fires, kind to people**

Inergen® is safe for people – it consists entirely of naturally occurring gases, more importantly people can breathe normally as they exit the room.

At the same time as reducing the oxygen concentration in the room to smother the fire, Inergen® increases the ambient carbon dioxide concentration to about 3%. The increased carbon dioxide (CO<sub>2</sub>) level stimulates respiration and the way the body metabolises oxygen. In atmospheres with increased levels of carbon dioxide, the human body reacts physiologically to increase the efficiency and rate of oxygen transfer to the brain.

The net effect is that mental performance is maintained and people can comfortably breathe the reduced oxygen atmosphere while they exit out of the area.

Inergen® is stored as a compressed gas, therefore there is no fogging or misting when it is released, so exits remain clearly visible.

### **Safe for the environment**

Inergen® is a patented blend of Nitrogen, Argon and CO<sub>2</sub>. All these gases occur naturally in the atmosphere – we breathe them every day. An Inergen® release simply changes the balance of gases in a room temporarily; it does not introduce any new man-made chemicals. The components of Inergen® is released back into the atmosphere where they return to nature's cycle.

Inergen® is not a chemical halocarbon. It does not contain any ozone depleting substances and has no greenhouse impact. The unique combination of gases in Inergen® was developed to provide a safer, non-chemical, alternative to Halon.

### **Easily installed and maintained**

Inergen® gas cylinders can be located up to 200 metres or more away from the area they will protect and by using directional valves, a single bank of cylinders can protect a number of areas. Additionally, the cylinder valves have been impact tested and fitted with a permanent cylinder cap to exceed the Australian Standard AS4214, and to protect against accidental damage.

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# Protecting lives, property and the environment

Replacing the cylinders after discharge is simple and affordable. Wormald can make arrangements for immediate system reinstatement to minimise business disruption.

Because Inergen® is made from naturally occurring components it is not subject to current federal government ozone or greenhouse regulation. It is not a controlled substance and will not be included in the government's proposed greenhouse carbon tax system.

The unique and patented Inergen® system is available exclusively through Wormald – Australia's most trusted name in fire protection.

## **Wormald's complete fire protection services**

Wormald has built an enviable reputation as a world leader in fire protection systems through our ability to provide dependable and effective

systems for all types of facilities. Our systems have been chosen to protect technically challenging hazardous and sensitive environments, as well as to provide cost effective fire detection and suppression for general areas. By combining design, supply, installation, commissioning and maintenance services, Wormald can provide your business with fire protection appropriate to your risk profile and budget.

With more than 2,000 employees throughout Australasia, Wormald has the talent and expertise to provide you with the best total fire protection solutions. Most importantly, we can give you peace of mind.

We like to think of ourselves as your partner in fire prevention.

Wormald. Protecting people and property.

*FACT: Releasing Inergen® has zero environmental impact as it contains no hazardous decomposition components.*



Safe for People, Property, And the Planet.

Available at Wormald

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