



## SAPHIRE® Fire Suppression Systems

### Multiple levels of protection

- Total flooding of hazard areas
- No damage to valuable assets
- Wide range of applications
- Effective on Class A, B and C fires

### People- and environment-friendly

- Low odor clean agent
- Safe for occupied spaces at design concentration
- Zero ozone layer depletion

Using water alone as a fire suppressant in areas where electronics operate and high-value assets are stored could be as devastating as fire itself. Protect these assets with an ANSUL® SAPHIRE clean-agent system, custom-engineered to quickly suppress fires without causing harm to equipment, people or the environment.

### Choose a Revolutionary Fire Suppression Agent

The SAPHIRE system utilizes the 3M™ Novec™ 1230 fire protection fluid – a clear, colorless and low odor clean agent that instantly vaporizes upon discharge, absorbing heat and providing total flooding of protected spaces.

The system is especially suited for suppressing fires in occupied spaces, in areas where an electrically non-conductive medium is required, where electronic systems cannot be shut down in an emergency and where cleanup of other agents poses a problem.

### People- and Environment-Friendly

Novec 1230 provides a wide safety margin because it is used at concentrations of only 4 to 6% by volume which are well below the 10% concentration maximum for safe exposure. In accordance with NFPA 2001, it is safe for occupied spaces.

The agent has zero ozone depletion potential, an atmospheric lifetime of just five days and a global warming potential of 1.0, making it the most environment-friendly chemical clean agent.

### State-of-the-Art Detection and Control

Even before a fire reaches the flame stage, SAPHIRE systems can detect and suppress it. This state-of-the-art detection and control system combines exclusive AUTOPULSE microprocessor control panels with highly sensitive smoke, heat and flame detectors.

When fire is detected, AUTOPULSE control panels will sound alarms, close doors, shut down equipment and release the fire suppression system. The system provides automatic detection, day and night, in conjunction with manual pull stations.



## APPLICATIONS FOR SAPPHIRE SYSTEMS

Aviation facilities  
Commercial/naval vessels  
Computer and electronic  
control rooms  
Critical military systems  
Data processing centers  
Medical facilities  
Museums  
Offshore platforms  
Power generation plants  
Tape storage and vaults  
Telecommunication sites

### **The Ultimate Fire Suppression Solution**

The ANSUL brand promises a full range of quality fire protection solutions – from automatic detection and suppression systems to a complete line of wheeled and hand portable fire extinguishers and more. Plus, our extensive network of Authorized ANSUL Distributors provides factory-trained professionals to serve our customers virtually anywhere in the world.

### **A Passion for Protection**

Dedicated customer support. Extensive product portfolio. Engineering excellence. Trusted, proven brands. Tyco Fire Protection Products offers all of these attributes, plus a passion for protection. It's what drives us to create solutions to help safeguard what matters most—your valued people, property and business.



# THE CLEAR WINNER

SAPPHIRE® Clean Agent Fire Suppression Systems

# WHEN IT COMES TO PROTECTING CRITICAL ASSETS, NOTHING COMES CLOSE TO SAPPHIRE

Using water as a fire suppressant in areas where electronics operate and irreplaceable, high-value assets are stored could be as devastating as fire itself. Protect them instead with an ANSUL® SAPPHIRE® clean agent system, custom-engineered to quickly suppress fires and protect sensitive equipment without causing harm to people or the environment.

## THE DIFFERENCE IS CRYSTAL CLEAR

The heart of the system is revolutionary 3M™ Novec™ 1230 fire protection fluid, a clear, colorless and odorless clean agent. Stored in cylinders in its fluid form, Novec 1230 instantly vaporizes upon discharge, totally flooding protected spaces and absorbing heat better than water. In tandem with a sophisticated ANSUL AUTOPULSE® control panel, the SAPPHIRE system suppresses a fire before it can start by detecting it at invisible levels. And once the danger has passed, Novec 1230 quickly evaporates without harming any valuable assets.

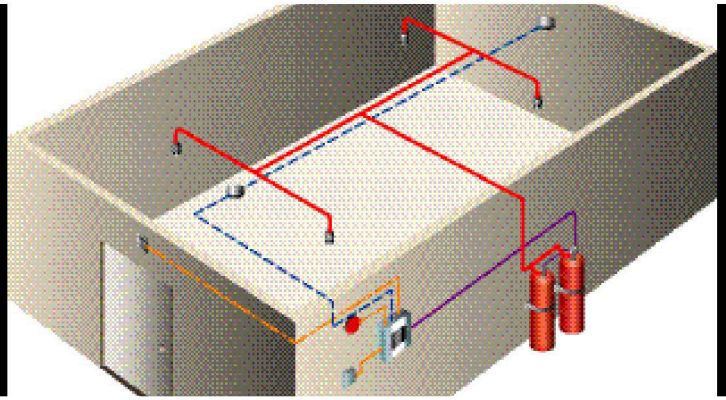
SAPPHIRE suppression systems represent the most effective fire protection on the market today. These systems are especially suited to suppress fires in areas where an electrically non-conductive medium is required, where electronic systems cannot be shut down in an emergency, where cleanup of other agents poses a problem, and in normally occupied areas that demand a non-toxic agent.

**REPLACES HALON, HFC'S AND PFC'S ■ EFFECTIVE ON CLASS A, B AND C FIRES**

**ZERO OZONE DEPLETION ■ LOW DESIGN CONCENTRATION REQUIREMENTS**

**UL/ULC, FM AND OTHER INTERNATIONAL APPROVALS**

# TYPICAL SAPPHIRE SYSTEM DESIGN



## SAFE FOR PEOPLE

Because it is used at concentrations of only 4 to 6% by volume, well below the 10% concentration maximum for safe exposure, Novec 1230 provides the widest safety margin of any chemical clean agent available today. In accordance with NFPA 2001, Novec 1230 is safe for occupied spaces.

## SAFE FOR THE PLANET

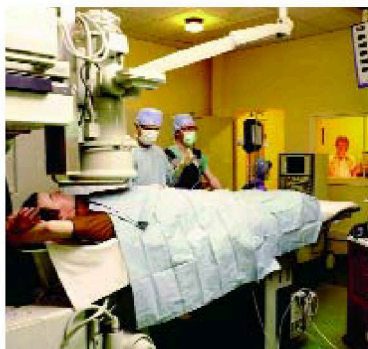
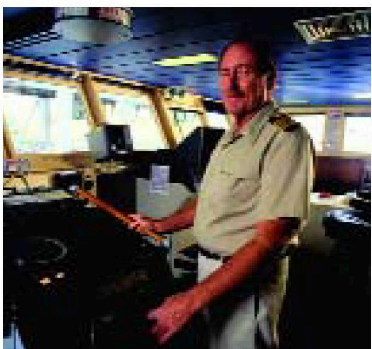
An ozone depletion potential (ODP) of zero, a global warming potential (GWP) of one and a five-day atmospheric lifetime (the next closest product is 33 years) makes Novec 1230 the cleanest, most environment-friendly chemical agent in existence.

## TOTAL AREA PROTECTION

The standard ANSUL SAPHIRE fixed nozzle system is capable of automatic detection and actuation and/or remote manual activation. Detection is provided 24/7 through an ANSUL AUTOPULSE® Control System, with other detection options available. Each system is custom engineered to the specific application by trained ANSUL distributors.

## APPLICATIONS THAT BENEFIT FROM SAPPHIRE SUPPRESSION SYSTEMS:

- AVIATION FACILITIES
- COMMERCIAL/NAVAL VESSELS
- COMPUTER AND ELECTRONIC CONTROL ROOMS
- CRITICAL MILITARY SYSTEMS
- DATA PROCESSING CENTERS
- MEDICAL FACILITIES
- MUSEUMS
- OFFSHORE PLATFORMS
- POWER GENERATION PLANTS
- TAPE STORAGE AND VAULTS
- TELECOMMUNICATIONS SWITCH ROOMS





Ansul Incorporated  
One Stanton Street  
Marinette, WI 54143-2542

800-862-6785 (United States, Canada)  
715-735-7411 (International)  
[www.ansul.com](http://www.ansul.com)

