

# MX 1230 FIRE EXTINGUISHING SYSTEM

WITH 3M™ NOVEC™ 1230 FIRE PROTECTION FLUID

Highly effective and safe for people,  
the environment, and sensitive assets



# PROTECT SENSITIVE ASSETS WITH ENVIRONMENTALLY SAFE MINIMAX MX 1230 SYSTEMS

Lost data, the breakdown of machines and equipment on which enterprise-critical business processes are dependent, or a total loss of operations – these risks are a concrete threat for every company. Businesses with unique and high-value technical equipment and central IT systems are dependent on the constant availability of critical operating resources. You have to rely on your fire protection system to minimize costly business interruption.

The Minimax MX 1230 fire extinguishing system with 3M™ Novec™ 1230 Fire Protection Fluid detects fire in its initial stage and extinguishes exceptionally fast, flooding the room in less than 10 seconds. Novec™ 1230 is low in acute toxicity, and evaporates 50 times faster than water, making it ideal for protection of sensitive assets..

## High pressure capability for your special hazard needs

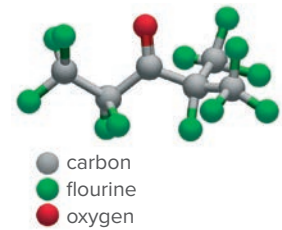
The MX 1230 System can be individually adapted to suit nearly every area. Our unique charging pressures of up to 725 psi deliver higher fill ratios, longer pipe lengths, and multi-zone capability. Hazard-specific design calculations optimize system components like nozzle bores and container fill volumes down to the smallest detail.

## Simple and effective operation

When a fire is detected by one or more of the automatic detectors or when a pull station is activated, the fire detection control panel sets off an alarm. After a brief time delay the pressurized extinguishing agent cylinders are opened either electrically or pneumatically. The liquid extinguishing agent flows to the nozzles where it vaporizes, rapidly and effectively flooding the room.

## Extinguishing agent Novec™ 1230

Novec™ 1230 acts both physical and chemically. Its carbon, fluorine and oxygen molecule interrupts the combustion reaction by depriving the flame of heat. Colorless and almost odorless, it is widely used throughout the world due to its environmental properties, and is the standard in many countries for managing IT and electrical risks. Novec™ 1230 is suitable for class A, B, C fires and is used as a total flooding agent. It is neither corrosive nor electrically conductive and will not cause damage through short circuits or residues left on sensitive components.



**Novec™ 1230 Molecule**



725 psi systems make it possible to locate agent supply away from the protected area.



# EXTINGUISH FIRES RAPIDLY WITH NO RESIDUE

## 3M™ Blue Sky Warranty

3M™ protects the use of Novec™ 1230 with its 20-year “Blue Sky Warranty”, stating that if Novec™ 1230 Fire Protection Fluid is banned from or restricted in use as a fire protection agent due to ODP (Ozone Depletion Potential) or GWP (Global Warming Potential), 3M™ will refund the purchase price of your Novec™ 1230 fluid. (Refer to 3M™ for full warranty details.)

## Personal Safety

Life safety is a critical issue when selecting a special hazards fire suppression product. 3M™ Novec™ 1230 Fire Protection Fluid is both low in acute toxicity and is a highly efficient fire extinguishant. The wide margin between Novec 1230 fluid’s use concentration and “No Observed Adverse Effects Level” provides the widest margin of safety relative to other chemical clean agents, CO2, and inert gas mixtures. Novec 1230 fluid has been approved by the EPA Significant New Alternatives Policy (SNAP) Program for use as a halon replacement in both total flooding and streaming applications.



### 3M™ Novec™ 1230 Fire Protection Fluid

<b>Chemical formula</b>	CF <sub>3</sub> CF <sub>2</sub> C(O)CF(CF <sub>3</sub> ) <sub>2</sub>
<b>Chemical name</b>	dodecafluoro-2-methylpentan-3-one
<b>ISO designation</b>	FK-5-1-12
<b>Specific weight 68° F (20° C)</b>	3.04 lbs/gal (1.41 kg/l)
<b>State of aggregation</b>	Liquid at 77°F/4.69 psi (at 25°C/1.013 bar)
<b>Boiling point</b>	120.5°F at 14.69 psi (at 49.2°C/ 1.013 bar)
<b>Environmental properties</b>	No ozone depletion potential (ODP 0) Low global warming potential (GWP 1) Atmospheric lifetime of 5 days

## Applications

- Data processing and telecommunications facilities
- Computer and server rooms
- Historical and cultural properties
- Control rooms
- Medical facilities
- Any environment sensitive to water or foam-based suppressants



Enhanced nozzle design is UL approved at increased design concentrations for heights up to 17' 9", eliminating the need for two levels of nozzles and pipe networks.



# MX 1230 UNIQUE SYSTEM ADVANTAGES

- Environmentally safe, with zero ozone layer impact
- World-wide recognized and approved extinguishing agent
- Novec™ 1230 is protected by the 3M™ “Blue Sky Warranty”
- Systems optimized with professional MX 1230 calculation software
- No extinguishing agent residues, neither corrosive nor electrically conductive
- Rapid extinguishing, exceedingly safe for occupied areas
- Optimal replacement for environmentally damaging Halon systems
- Robust design with low installation and maintenance costs
- Compact and space saving
- UL/FM approved system
- Higher operating pressures of 725 psi provide:
  - Greater fill ratios
  - Longer pipe lengths
  - Smaller pipe diameters
  - Multi-zone systems

## Design flexibility for any special hazard environment

- Available cylinder sizes/nominal fill: 60, 140, 220, 280, 390, 500 lbs
- Pressures available: 360, 725 psi
- Single- or multi-cylinder systems
- Single- or multi-zone systems



Minimax can provide multi-cylinder and multi-zone systems to protect any special hazard area

### Example of use in Electronic Data Processing

Design concentration*	Minimum usage quantity
<b>4.5% by volume</b>	122 lb/3000 cu ft

\*NFPA 2001 - 2012 Edition

*discover...*

#### MINIMAX FIRE PRODUCTS

For over 100 years, Minimax has delivered innovative solutions for the most demanding fire protection challenges around the world. Minimax Fire Products brings this capability to the North American market. We are part of the Minimax Viking Group, a leader in fire protection with over \$1.1 billion in sales and 6,000 employees. Our expertise in gas based fire detection and protection systems is supported by Viking SupplyNet's nationwide distribution and fabrication network, ensuring that you receive the best in system design and product availability from a single source.

Our Minimax research center in Bad Oldesloe, Germany works closely with test and standardization authorities to develop solutions often used as the basis for fire protection regulations and approvals. You can trust Minimax Fire Products to deliver the most reliable and cost-effective fire protection.

**MINIMAX®**

FIRE PRODUCTS

#### MINIMAX FIRE PRODUCTS

Phone 888.882.0191  
 Fax 269.818.1608  
 sales@minimaxfp.com  
 www.minimaxfp.com

© 2015 Minimax USA LLC. All rights reserved.  
 MX 1230 2/2015