

CLEAN AGENT FIRE EXTINGUISHING SYSTEM

MX 1230 Extinguishing Fluid

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The technical data described herein is for components of the Minimax Fire Products MX 1230 Clean Agent System. For design, installation, and operation instructions, refer to the latest edition of the original source documents: Installation and Service Manual (Part No. 889327), Design Manual (Part No. 889334), and Operation Manual (Part No. 889325).

1. DESCRIPTION

The Minimax Fire Products MX 1230 Fire Extinguishing System uses 3M Novec 1230 fluid, which is a next generation alternative for Halon replacement. MX 1230 is used to protect the contents of an area that contains valuable equipment or materials, including, but not limited to Museums, Banks, Clean Rooms, Data Centers, and Libraries. Novec 1230 leaves no residue behind, has zero ozone depletion, and has the lowest atmospheric lifetime for halocarbon alternatives. Novec 1230 extinguishes the fire by heat absorption. MX 1230 results in less down time, less clean up, limited business interruption, and it is environmentally friendly.



2. LISTINGS AND APPROVALS

 **UL Listed:** For the Clean Agent Fire Extinguishing System

 **FM Approved:** For the Clean Agent Fire Extinguishing System

3. TECHNICAL DATA

Specifications

Minimum and Maximum Fluid Storage Temperatures: 0 °F to 122 °F (-18 °C to 50 °C)

Minimum and Maximum Temperatures of Protected Spaces per UL and FM: 60 °F to 80 °F (15.6 °C to 26.7 °C)

Chemical Formula: $CF_3CF_2C(O)CF(CF_3)_2$

Chemical Name: Dodecafluoro-2-methyl-pentane-3-one

Molecular Weight: 316.04

ISO Designation: FK-5-1-12

Specific Weight 68 °F (20 °C): 3.04 lbs / gal (1.41 kg / l)

Density, Saturated Liquid @ 77 °F / 4.69 psi (@ 25 °C / 1.013 bar): 99.9 kbm / ft² (1.60 g / ml)

Density, Gas 1 ATM @ 77 °F / 4.69 psi (@ 25 °C / 1.013 bar): 0.852 lbm / ft³ (0.0136 g / ml)

Freezing Point: -162.4 °F (-108 °C)

Boiling Point: 120.5 °F at 14.69 psi (49.2 °C at 1.013 bar)

Specific Volume, 1 ATM @ 77 °F / 4.69 psi (@ 25 °C / 1.013 bar): 1.17 ft³ / lb (0.0733 m³ / kg)

Liquid Viscosity @ 77 °F / 4.69 psi (@ 25 °C / 1.013 bar): 0.56 (0.41 centistokes)

Heat of Vaporization @ BP: 37.9 BTU / lb (88.1 kJ / kg)

Solubility of H₂O in Novec™ 1230 @ 77 °F / 4.69 psi (@ 25 °C / 1.013 bar): <0.001% by wt.

Vapor Pressure @ 77 °F / 4.69 psi (@ 25 °C / 1.013 bar): 5.87 psig (0.40 bar)

Dielectric Strength (rel to N₂ at 1 ATM): 2.3

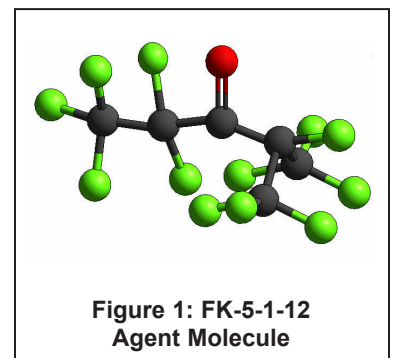
Environmental Properties: No ozone depletion potential (ODP 0)

Low global warming potential (GWP 1)

Atmospheric Lifetime <5 days

Ordering Information

3M™ Novec™ 1230 agent Part Number: 88 8054



Minimax Technical Data may be found on
Minimax Fire Products' Web site at
<http://www.minimaxfp.com/>.
The Web site may include a more recent
edition of this Technical Data Page.