

1- FM200 Fire Suppression System?

FM-200 systems are internationally accepted as providing reliable and effective fire protection solutions for high value assets, processes and locations, as well as the people who work in these protected areas.

After prohibition of use of halon gas, FM200 is the most widely used clean agent as an alternative.

FM-200 storage containers are designed to hold FM-200 in liquid form and Nitrogen, which is used to super-pressurize the container to 24.8 bar (360 psi) at 20°C.



FM200 are effective on class A, B and C fires.



Solid + Electric



Flammable Liquids



Gases



Metal



Grease Cooking Oil

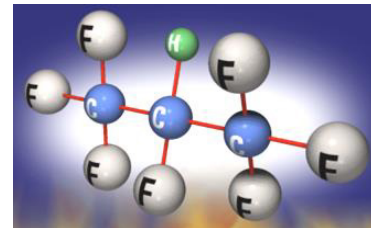


FM200 is a colorless, odorless gas that leaves no residue to clean up. Unlike water, FM200 is an electrically nonconductive agent that will not short-out electronic equipment. And unlike the very cold discharge of carbon dioxide, FM200 will not thermally shock delicate circuitry.

FM200 contains no bromine or chlorine and therefore has zero Ozone Depleting Potential (ODP).

2- Properties

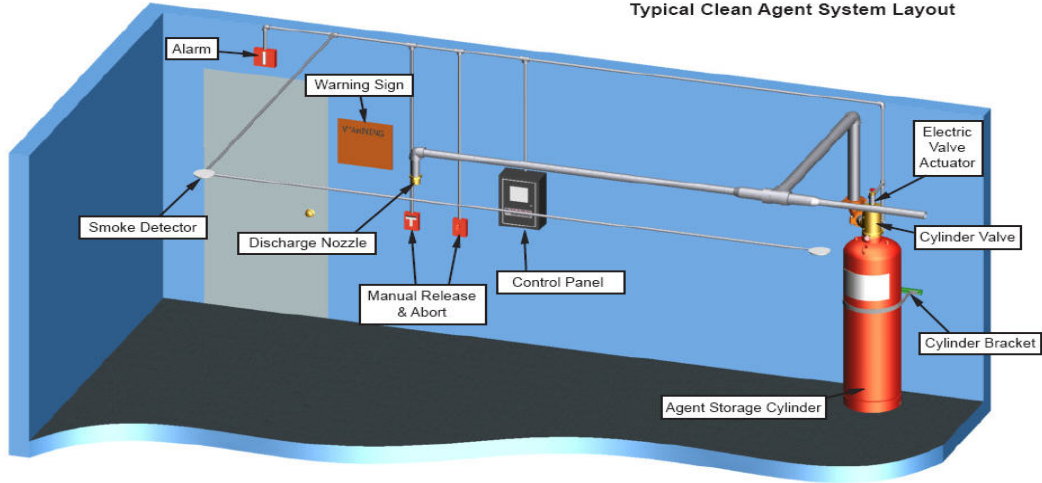
	FM200
Name	HFC-227ea
Chemical Formula	CF ₃ CHFCF ₃
Chemical Name	Heptafluoropropane
Boiling Point @ 1 atm	-16°C
Vapour Pressure @ 20°C	3,9 bar
Liquid Density @ 20°C	1,4 kg/l
Gas Density @ 20°C, 1 atm	7,3 kg/m ³



3- FM200 Fire Fighting Effectiveness

The functioning of FM-200 is that 80% of its firefighting effectiveness is achieved through heat absorption and 20% through direct chemical means (action of the fluorine radical on the chain reaction of a flame).

4- FM200 System Operation



FM200 should be discharged into enclosure area within 10s or less and therefore the system is designed in accordance with purpose.

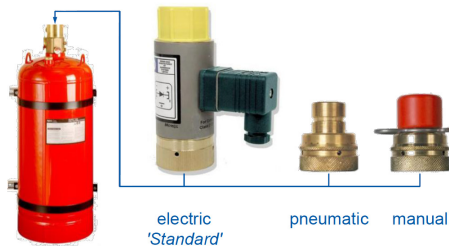


The main components of the system FM200 Gas, storage cylinders, actuators for activation of cylinder valve, discharge nozzle and control system.

The system can operate as manually or automatically.

For automatic activation, the system should have detection system with different working principle. First signal is for warning and beginning alarms. Second alarm allows to discharge gas.

Manual activation can be made from FM200 control panels and the integrated automation system to FM200 system.



In case of any electrical fault, the system can be activated with manual actuator where is located on cylinder valve.



5- Applications

- ✓ Marine
- ✓ Computer suites and data centres
- ✓ Offshore oil/gas exploration & production facilities
- ✓ Gas turbine enclosures
- ✓ Telecommunications centres
- ✓ Power generation
- ✓ Museums, archives & data storage

