Kidde Marine

K-45-100M

The New Option for Marine Fire Protection...

Kidde Marine Engineered Fire Suppression System Designed for Use with 3M™ Novec™ 1230 Fluid

If you're building a new vessel or retrofitting a halon system on an existing one, the best fire protection decision you can make is to select a Kidde Marine Fire Suppression System utilizing Novec 1230 fluid. Here's why:

Life Safety. Novec 1230 fluid, like halon 1301 and other halon replacements, works by interrupting the fire on a molecular level, not by taking oxygen from the protected space. So it is the preferred fire suppression agent for protection of shipboard spaces where crew or other occupants may be present.

Environmental. Novec 1230 fluid has an ozone depletion of potential of zero and the lowest global warming potential of any clean agent available making Novec 1230 fluid the natural choice for customers concerned about the environment.

Marine Approvals. Kidde Engineered Systems utilizing Novec 1230 fluid are approved for use in marine applications such as machinery spaces and flammable liquid storage areas by major regulatory agencies such as UL, USCG, ABS, DNV, LRS, and MCA.

Weight and Space. Kidde Engineered Systems weigh less and take up less space than either carbon dioxide or water mist systems, so they provide more fuel-efficient solutions to shipboard fire protection with more room for revenue-generating cargo or passengers.

Before you leave port, make sure you have installed the right fire suppression system. A Kidde Engineered System designed, installed and serviced by the worldwide network of Kidde fire protection specialists.

GENERAL DESCRIPTION

Kidde Marine engineered fire suppression systems utilizing Novec 1230 Fluid are used to suppress fires in specific hazards or equipment where an electrically non-conductive agent is required, where agent cleanup creates a problem, where extinguishing capability with a low weight is desired and where the hazard is normally occupied. Kidde Engineered Systems utizling Novec 1230 Fluid are intended to protect spaces containing the following hazards:

- Class A: Surface type fires; wood or other cellulose-type material
- Class B: Flammable liquids
- Class C: Energized electrical equipment

3M NOVEC 1230 FIRE PROTECTION FLUID

Novec 1230 fluid is a fluoroketone developed specifically by 3M for fire protection use. It is a compound of carbon, fluorine and oxygen (CF3CF2C(O)CF(CF3)2). It is colorless, low-odor and electrically non-conductive. It suppresses fire by a combination of chemical and physical mechanisms without affecting the available oxygen. This allows personnel to see and breathe, permitting them to leave the fire area safely*. Novec 1230 fluid is acceptable for use in occupied spaces when agent concentration is in accordance with NFPA 2001, and the applicable rules of the International Maritime Organization (IMO) and/orUS Coast Guard.
*Note: Marine regulations require that personnel are evacuated before system discharge.

SYSTEM HARDWARE

Novec 1230 fluid is stored in steel cylinders superpressurized with nitrogen to 25-bar (360 psig). The cylinder valve assembly is equipped with a supervisory pressure switch connection for monitoring cylinder pressure. A pressure gauge and a safety disc are fitted to the valve in accordance with DOT requirements. Other system components include mounting brackets, control heads, pull stations, pilot cylinders, flex hoses, discharge delays, sirens, check valves, nozzles, etc. System controls can be configured to comply with all marine regulatory requirements. The system piping design is accomplished with Kidde flow calculation software, which performs the complex flow calculations necessary to achieve agent distribution with a discharge time of ten seconds or less.

MARINE APPROVALS

In addition to the numerous land-based listings and approvals Kidde Engineered Systems utilizing Novec 1230 fluid hold, approval and certification has been received from numerous maritime regulatory bodies, including:

- US Coast Guard
- Transport Canada (TC)
- American Bureau of Shipping (ABS)
- Lloyd's Register of Shipping (LR)
- Det Norske Veritas (DNV)

SYSTEM DESIGN, INSTALLATION & SERVICE

Kidde Engineered Systems utilizing Novec 1230 fluid are available through a global network of qualified distributors. Our distributors can provide the services (design and installation, retrofit, recharge, and maintenance) necessary to keep your Kidde system functioning properly and in compliance with all applicable marine fire protection regulations.

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45-100M November 2005
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