



ORDINARY COMBUSTIBLES



FLAMMABLE LIQUIDS



ELECTRICAL EQUIPMENT



SYSTEM DESCRIPTION

The principal behind the FK-5-1-12 systems is to suppress fires by spraying a predefined quantity of agent into one or more areas containing the location to be protected. The amount of agent required is calculated by the area(s) evaluated as well as by the concentration to be achieved according to the nature of the risk. The suppression agent is stored in one or more cylinders depending upon the zone to be protected.

The air integrity of the volume(s) involved is essential to the effectiveness of this type of system. Once the system is activated, either by cross zone smoke detection or by activating a manual station, the suppression agent will be released in less than 10 seconds allowing a quick response thus reducing material damage and downtime of your operations.

This system is governed by NFPA 2001 and NFPA 72..

FIRE SUPPRESSION METHOD

FK-5-1-12 works primarily by absorbing heat from a fire at the molecular level. This has the effect of reducing the chemical energy to the point where the combustion reaction cannot survive. The released molecules will also correlate with the free ions released by the burning product to cancel the chain reaction of the fire.

FK-5-1-12 does not significantly reduce the amount of oxygen. The discussion is more about the toxicological limit. Under the NOAEL (No Observable Adverse Effect Level), it is entirely safe on the respiratory system.

The FK-5-1-12 perfectly meets today's environmental requirements, as it does not affect the ozone layer, and a lifetime of about 5 days in the atmosphere. This makes this chemical fire suppressant one of the most effective in the struggle against greenhouse gases.

HOW THE SYSTEM WORKS: (GENERALLY)

When the alarm from the two smoke detection zones of the release panel is activated, the suppression agent is automatically discharged after a predetermined delay. The panel then sends a signal to the control head of the system to generate the discharge, or instantly activate the manual actuator station to initiate the discharge manually.

When an alarm is triggered in a zone, the bell and the piezo of the release panel are activated. When the alarm for both detection zones are activated, the bell silences and the horn pulsates at 60 times per minute until the end of the delay. When the delay is over, the horn emits a continuous blare, and the suppression agent is discharged. The strobe light operates in the same way as the horn.

A variety of alarm, troubles and control signals can be transmitted at different stages in the process. The building's alarm panel must receive these signals to comply with the applicable codes.

COMMON APPLICATIONS

- Data processing center: computer rooms/servers
- Electrical rooms, control rooms, archive rooms, telecommunications rooms
- Museums and art galleries
- Emergency vehicles
- Naval engine rooms
- Hospital Centers: X-ray and scanning rooms