

LIQUID AGENT FOR KITCHEN PROTECTION

K COOKING OIL AND GREASE FIRES

SYSTEM DESCRIPTION

The purpose of the SF/A and SF/P systems is to suppress fire by spraying the extinguishing agent in hazardous areas such as plenum spaces, cooking surfaces where greasy steam may be generated, and evacuation ducts.

When the liquid agent is discharged, it reacts on the greasy surfaces which are subject to high temperatures, causing a cooling and saponification effect. The suppression agent is stored in one or more tanks with varying quantities determined by assessing the risk area to be protected.

These systems are governed by NFPA 96 and NFPA 17A.

FIRE SUPPRESSION METHOD

In addition to the cooling effect, saponification is defined by the formation of a layer of foam, similar to soap, covering the surface of the grease involved in the fire. This layer acts as insulation between the grease and the air, preventing fire reignition and releasing greasy vapors.

HOW THE SYSTEM WORKS

Following the detection of excessive heat via mechanical, electrical or pneumatic detection devices, or via a manual actuator, the suppression agent will be activated by the system's release mechanism. A release panel will be required when the detection is electric.

The suppressing agent will then be released from the cylinders to the nozzles through a fixed piping network. The pressure used for this distribution shall be either; stored in the cylinders (permanent pressure) in the case of SF/P systems, or in cartridge(s) (auxiliary pressure) in the case of SF/A systems. Following the activation, an alarm signal shall be transmitted to the building fire alarm panel.

The SF/A system's cylinders, as well as the activation mechanisms, are housed in stainless steel, thus coordinating with the esthetics of the cooking hood and appliances. In addition, the SF/A suppression agent has a neutral PH which minimizes aesthetic damage following activation.

COMMON APPLICATIONS

- Commercial Kitchens, institutions, hotels, hospitals, or production facilities.
- Other risks involving greasy fumes.