



USE OF ABC DRY CHEMICAL IN THE VICINITY OF AIRCRAFT

Recently we have seen a proliferation of ABC dry chemical extinguishers around airport ramps, fueling areas and maintenance areas. THIS IS NOT ALLOWED! Both NFPA Standards and the IFC (International Fire Code) do not allow ABC dry chemical extinguishers in these areas..

NFPA 407 Standard for Aircraft Fuel Servicing – Tentative Interim Amendment (TIA 12-1)

4.1.6.3* ABC multipurpose dry chemical extinguishers (ammonium phosphate) shall not be placed on airport fueling vehicles, airport fuel servicing ramps or aprons, or at airport fuel facilities.

A.4.1.6.3 Multipurpose dry chemical (ammonium phosphate) fire extinguishing agent is known to cause corrosion to aluminum aircraft components. Although the agent is capable of extinguishing fires on or near aircraft, it is likely that the agent will spread to other uninvolved aircraft, causing damage from corrosion.

IFC – (International Fire Code) and Commentary - CHAPTER 11: AVIATION FACILITIES

Chapter 11 specifies minimum requirements for the fire-safe operation of airports, heliports and helistops. Safe use of flammable and combustible liquids during fueling and maintenance operations is emphasized. Availability of portable B:C rated fire extinguishers for prompt control or suppression of incipient fires is required.

SECTION 1105 FIRE EXTINGUISHERS

1105.1 General. Portable fire extinguishers suitable for flammable or *combustible liquid* and electrical-type fires shall be provided as specified in Sections 1105.2 through 1105.6 and Section 906. Extinguishers required by this section shall be inspected and maintained in accordance with Section 906.

*Commentary - *Fire extinguishers must be approved for Class B and C fires. Placement and distribution of fire extinguishers should conform to NFPA 10 and 407 and Section 906 of the code. Generally, portable fire extinguishers are required in the immediate vicinity of all flammable and combustible liquid storage, use and dispensing; welding and cutting; spray finishing and other maintenance operations, as well as on aircraft fueler and service vehicles..*

It should be noted that Sections 1105.2, 1105.4, 1105.5 and 1105.6 specifically require B:C rated portable extinguishers on vehicles and in locations that are in close proximity to aircraft. This is because it has been reported by the National Safety Council that A:B:C-rated portable fire-extinguisher chemicals pose a severe aircraft damage problem. While A:B:C-rated portable extinguishers generally have an excellent fire –fighting capability and track record, the monoammonium-phosphate chemical extinguishing agent is highly corrosive to aluminum. This agent will melt and flow when it comes into contact with heated surfaces and, once it comes into contact with hot aluminum and works its way into the structural joints and crevices, it cannot be flushed out as the B:C-dry chemical agents can. Clean-up following use of an A:B:C-rated extinguisher on an aircraft could require disassembly of the aircraft to remove any remnant of the chemical to prevent hidden corrosion damage that could lead to structural failure.

ABC dry chemical is not the appropriate agent for fire protection for aircraft .

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