

TECHNICAL BULLETIN

Use of ABC Dry Chemical Fire Extinguishers on Aircraft Fires

The basic component of the extinguishing agent contained in an ABC fire extinguisher is monoammonium phosphate (sometimes referred to as MAP). The agent is very efficient at extinguishing Class A type fires because it melts and forms a crust on the surface of the burning material, creating an oxygen barrier. When used on an aircraft fire the agent can flow into minute structural cracks common in the aircraft's stressed aluminum surfaces. There it can combine with moisture to form phosphoric acid, a chemical that is highly corrosive to aluminum. The residue is extremely difficult to clean up and failure to completely clean the agent from the aircraft will, over time, result in corrosion that could compromise the integrity of the aircraft. For this reason Buckeye Fire Equipment Company does not recommend the use of ABC fire extinguishers on aircraft.