



## SELECTION OF FIRE EXTINGUISHERS FOR FIRES INVOLVING OXIDIZERS (SWIMMING POOL CHEMICALS)

Oxidizers, such as those used for treating swimming pools, have specific requirements for storage and fire protection. Always review the MSDS (Manufacturer's Safety Data Sheet) for the products being used for fire protection measures and incompatible materials before recommending fire protection.

**NFPA 10 2013 Edition** contains the following:

### Chapter 5 Selection of Portable Fire Extinguishers

#### 5.5.7 Areas Containing Oxidizers

**5.5.7.1** Only water-type extinguishers shall be installed in areas containing oxidizers such as pool chemicals

**5.5.7.2\*** Multipurpose dry chemical fire extinguishers shall not be installed in areas containing oxidizers such as pool chemicals

**A.5.5.7.2** A dry chemical fire extinguisher containing ammonium compounds should not be used on oxidizers that contain chlorine. The reaction between the oxidizer and the ammonium salts can produce the explosive compound nitrogen trichloride (NCl<sub>3</sub>).

It is apparent from the above excerpts that the "agent of choice" for fighting fires involving oxidizers is water. This is certainly a perfect application for the water pressure or water mist extinguishers. Remember that choosing the wrong type of extinguishing agent could be disastrous.

Your customers that use or store oxidizers should consider that the hazards of oxidizers may manifest themselves in one or more of the following hazardous situations:

- They increase the burning rate of combustible material.
- They may cause spontaneous ignition of combustible materials.
- They may decompose and may liberate hazardous gases.
- They may undergo self-sustained decomposition, which may result in an explosion.

We strongly suggest that you and your customers that use, store or handle oxidizers review **NFPA 430 – Code for the Storage of Liquid and Solid Oxidizers**. In particular, paragraphs 4.11.6 through 4.11.6.3 give recommendations and warnings regarding both the appropriate and inappropriate types of fire extinguishers to be used.