1.8. Dry Chemical Systems

1.8.1. Dry Chemical

A powder composed of very small particles, usually sodium bicarbonate, potassium bicarbonate, or ammonium phosphate based with added particulate material supplemented by a special treatment to provide resistance to packing, resistance to moisture absorption (caking), and the proper flow capabilities.

1.8.2. Multipurpose Dry Chemical

Ammonium phosphate-based extinguishing agent that is effective on fires involving both ordinary combustibles, such as wood or paper, and fires involving flammable liquids.

1.8.3. Dry Chemical System

A means of applying dry chemical that can be automatically or manually activated to discharge through a distribution system onto or into the protected hazard. The system includes auxiliary equipment.

1.8.4. Engineered System

Those requiring individual calculation and design to determine the flow rates, nozzle pressures, pipe size, area or volume protected by each nozzle, quantities of dry chemical, number and types of nozzles, and their placement in a specific system.

1.8.5. Pre-Engineered Systems

Those having predetermined flow rates, nozzle pressures, and quantities of dry chemical.

1.8.6. Local Application System

A supply of dry chemical permanently connected to fixed piping with nozzles arranged to discharge directly onto the fire.

1.8.7. Total Flooding System

A supply of dry chemical permanently connected to fixed piping and nozzles that are arranged to discharge dry chemical into an enclosure surrounding the hazard.

1.8.8. Expellant Gas

The medium used to discharge dry chemicals from container.

1.8.9. Discharge Nozzle

Device from which the dry chemical is discharged to provide for the suppression of a fire in the designated hazard.

1.8.10. Caking

A phenomenon that occurs when moisture chemically reacts with a dry chemical fire-extinguishing agent. This reaction results in materials that, being hydrated by moisture, stick together to form a large agglomerate, or what is more commonly referred to as lumps.