

Introduction to Chemguard Dry Chemical Powders

Chemquard has been a supplier of quality fire extinguishing dry chemical powders for almost two decades. Chemquard supplies a broad range of dry chemical powders based on monoammonium phosphate, sodium bicarbonate, and potassium bicarbonate. The well-known quality of Chemguard dry chemical powder is the result of many years of product research and development. One of the special procedures used during the manufacturing cycle is the siliconization treatment of the powder. This provides resistance to packing, moisture absorption (caking) and ensures proper flow characteristics. Constant quality control checks are used during the powder manufacturing process to control the powder composition, particle size through sieve analysis, bulk density, moisture content and hygroscopicity. The end result is a powder that is cost efficient with maximum fire extinguishing performance, versatility and storage stability.

Different types of Chemguard dry powders are necessary to extinguish different types of fires. The different type fire classifications listed on the Chemguard data sheets are based on NFPA Standards

Classifications are as follows:

Class A - Fires in ordinary combustible materials such as wood, cloth, paper, rubber and many plastics.

Class B - Fires in flammable liquids, oils, greases, tars, oil based paints, lacquers, etc. and flammable gases.

Class C - Fires involving "live" electrical equipment where the use of a non-conducting fire

Class D - Fires involving combustible metals and their alloys such as magnesium, sodium, potassium, etc.

In order of performance, fire tests on flammable liquids have shown potassium bicarbonate based dry chemical to be more effective than sodium bicarbonate based dry chemical. Similarly, the monoammonium phosphate based dry chemical has been found equal to or better than the sodium bicarbonate based chemical.

"Multi-Purpose" (ABC) is a monoammonium phosphate based dry chemical powder which is typically yellow in color. This powder is suitable for use on either Class A, B or C type fires.

The term "regular or Standard" (BC) dry chemical normally refers to a dry chemical that is suitable for use on either Class B or C type fires. These powders are either sodium bicarbonate or potassium bicarbonate based. In most instances the powder being referred to is the sodium bicarbonate type. This powder is normally white in color.

Purple K (PK) dry chemical powder is based on potassium bicarbonate. Because of its fast extinguishing capability on flammable liquid spills, it is typically used in high hazard risk areas such as refineries, chemical plants or airports. The normal color of PK powder is purple.

Chemguard dry chemical powders are suitable for use in most types of equipment from small extinguishers to large fixed installations and mobile units.

The various foam concentrates manufactured by Chemguard such as AFFF, AR-AFFF, High Expansion and Class A all has a significant degree of dry chemical compatibility. All Chemguard dry chemical powders are considered foam compatible