



# FIRECHEM FORCE



## PRODUCT DESCRIPTION

FireChem FORCE is a dry chemical powder based on reaction of Potassium Bi-Carbonate Urea complex and has achieved the lowest application density in the whole world (0.40Kg/m<sup>2</sup>)

### EXTINGUISHING MECHANISM

Fire incident datas indicate, small fires turn into towering infernos within a very short period of time due to high rate of free radical generation. Fire extinguishing efficiency is dependent on the rate of removal of these free radicals, which is directly proportional to the surface area of contact i.e. larger the surface area of powder; faster is the extinguishment.

FireChem Force possesses the unique decrepitation property, where powder particles break down into large number of minute particles in the flame zone, thereby the surface of powder in the combustion zone, increase manifold. Large surface area and high rate of removal of free radicals, gives FireChem FORCE a miraculous power for flame knock-down which cannot be matched by other conventional powders based on SBC (Sodium Bicarbonate) or PBC (Potassium Bicarbonate) or MAP (Monoammonium Phosphate).

## SPECIFICATIONS

PROPERTIES	TYPICAL VALUES
APPEARANCE	OFF WHITE, FREE FLOWING POWDER
APPARENT DENSITY	0.5 - 0.6 GM/CM <sup>3</sup>
AVERAGE PARTICLE SIZE	55 - 65 MICRONS
HYGROSCOPICITY	2% MAX
WATER REPELLENCY	1.5% MAX
MOISTURE CONTENT	LESS THEN 0.25% + 60°C
TEMPERATURE STABILITY	
CORROSION & ABRASION	NON CORROSIVE OR ABRASIVE

## STORAGE AND SHELF LIFE

Rigid quality control ensures FireChem force withstands extreme climatic conditions. Powder remains free flowing with no loss of properties throughout the shelf life. The shelf life of 5 years can be expected if stored properly in its original packing of plastic drums. It can be stored up to 60° C.

## AREAS OF APPLICATION

- Portable fire extinguisher
- Wheeled units
- Fire trucks
- Fixed installations
- Powder cannons

# FIRECHEM PK 801



## PRODUCT DESCRIPTION

FireChem PK80, potassium Bicarbonate based dry chemical is a premium powder suitable for use in high-risk areas such as: refineries, chemical plants and airfields where superior fire extinguishing capabilities are of paramount importance. It is suitable for use on either class B or C type fires. Purple K is suitable for use as a recharge agent in most manufacturers fire extinguishers that utilize potassium bicarbonate based dry chemical powder. Airports have recognized the capability of FireChem PK 80 extensively in two agent fire extinguishing systems. It is also used in large "PK" dry chemical fixed systems covering LNG pumping stations.

FireChem PK80 is one of the most effective dry chemicals against class B fires. It is potassium bicarbonate based dry chemical containing flow enhancing chemical additives. FireChem PK 80 is a flowing, water replant, non-abrasive and when used as a fire extinguishing agent will produce no toxic effects.

When FireChem chemical powder is used on fires involving flammable liquids, it is generally accepted that when the powder is introduced directly into the fire area, it extinguishes the fire by interfering with the chemical chain reaction taking place in the combustion zone.

## SPECIFICATIONS

PROPERTIES	TYPICAL VALUES
APPEARANCE	PURPLE CRYSTALLINE POWDER
APPARENT DENSITY	0.8 – 101 GM/CM
HYGROSCOPICITY	< 2%
MOISTURE CONTENT	< 0.25%
WATER REPELLANCY	< 0.5%
HEAT TEST	PASSES THE TEST
FIRE EXTINGUISHER	PASSES THE TEST

## STORAGE AND SHELF LIFE

FireChem PK80 Dry Chemical powders are formulated so that they are not affected by long term storage. As a general guide all FIRECHEM powders are stable at low temperatures down to -60 F (-54 C), with an upper storage limit of 120 F (49 C)

## AREAS OF APPLICATION

- Oil Refineries
- Petrochemical plants
- Gas Processing Facilities
- Military Applications
- Aviation
- Power plants

# FIRECHEM BC 909



## PRODUCT DESCRIPTION

FireChem BC 909 is a general purpose dry chemical powder with a good efficiency and performance in fires of class B, C and E (up to 1,000 volts). FireChem BC 909 is based on the active ingredient sodium bicarbonate and ground to selected particle sizes and made resistant to influence of climatic extremes by means of flow promoting and moisture repellent additives.

Sodium bicarbonate powders extinguish flammable liquids by interfering with the chemical reactions which are taking place in the combustion zone. The free radicals in the flame attach themselves to the surface of the powder.

Subject to extinguishing quality the minimum expected fire rating obtained using FireChem BC 909 in a 6 kg portable fire extinguisher is 183B.

## SPECIFICATIONS

PROPERTIES	TYPICAL VALUES
CHEMICAL CONTENT	SODIUM BICARBONATE 88-92%
APPARENT DENSITY	MINIMUM 0.95 G/ML
PARTICLE SIZE	MAXIMUM 0.35 MM
RESISTANCE TO CAKING & LUMPING	PASSES
WATER REPELLANCY	> 2 HOURS
MOISTURE CONTENT	< 0.25%
TEMPERATURE STABILITY	-60°C TO +60°C

# FIRECHEM ABC 909



## PRODUCT DESCRIPTION

FireChem ABC 909 is a multi-purpose dry chemical powder with an ultra-high efficiency and performance in fires of class A, B, C and E (up to 1,000 volts). FireChem ABC 909 is a mixture of highly efficient mono-ammonium phosphate and ammonium sulphate ground to selected particle sizes and made resistant to influences of climatic extremes by means of flow promoting and moisture repellent additives.

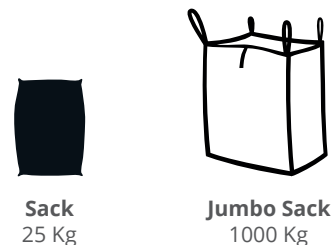
Subject to extinguishing quality the minimum expected fire rating obtained using FireChem ABC 909 in a 6 kg portable fire extinguisher is 43A / 233B.

In addition to the particle surface extinguishing effect of a Class B powder, Class ABCE powders have low melting/decomposition points in the order of 150 °C to 180 °C, and when these powders are applied to hot and smouldering surfaces, the particles fuse and swell to form a barrier which excludes oxygen and thereby completes the extinguishing process and prevents re-ignition.

## SPECIFICATIONS

PROPERTIES	TYPICAL VALUES
CHEMICAL CONTENT	MONO AMMONIUM PHOSPHATE 88-92%
APPARENT DENSITY	MINIMUM 0.95 G/ML
PARTICLE SIZE	MAXIMUM 0.35 MM
RESISTANCE TO CAKING & LUMPING	PASSES
WATER REPELLANCY	> 2 HOURS
MOISTURE CONTENT	< 0.25%
TEMPERATURE STABILITY	-60°C TO +60°C

## PACKAGING FOR ALL PRODUCTS



## APPROVAL FOR ALL PRODUCTS



**FIRE SAFETY DEVICES PRIVATE LIMITED**  
B-4, Rama Palace Commercial Complex, IInd Floor,  
Sector 20-B, Faridabad - 121007 INDIA  
Ph.: +91-129-2288196/7/8, Fax: +91-129-2288700  
E-mail: info@fcfsd.com | Website: www.fcfsd.com  
Helpline No. +91-9312837657