

Kerr Fire Fighting Chemicals



Fire Fighting Dry Chemical Powders

Kerr Fire Fighting Chemicals has been manufacturing fire extinguishing dry chemical powders and foam concentrates in England for over 50 years.

The **CENTRIMAX** and **ISOCOMP** powder ranges are the result of continual research and development. Cost efficiency, maximum fire extinguishing performance, versatility and storage stability have all been achieved through a commitment to ongoing research and product development. Careful raw material choice, control of composition, particle size distribution and the incorporation of special anti-caking, flow promoting and water repellency additives makes these dry chemical powders leaders in the world today.

Kerr Fire Fighting Chemicals is Europe's leading dry chemical powder manufacturer with the widest range of standard and high performance dry chemical powders currently available. These are extensively used for protecting life and assets all around the world.

Flammable material classes

There are five classes of hazardous flammable materials where dry chemical powders can be used. The members of each class have similar characteristics and fire fighting requirements. These are defined as:

- Class A:** Solid combustible material such as wood, cardboard, fabrics, plastic and paper.
- Class B:** Flammable liquids including a wide range of oils, gasoline, diesel, industrial chemicals like alcohols, ketones, ethers and esters.
- Class C:** Flammable gases such as hydrogen, coal gas, Liquefied Petroleum Gas (LPG) and Liquefied Natural Gas (LNG).
- Class D:** Combustible metals and their alloys such as aluminium, sodium, and titanium.
- Class E:** One of the above classes with the addition of live electrical contacts.

Dry Chemical Powders

Different types of powder are necessary to combat fires in these different hazard classes. Kerr Fire Fighting Chemicals manufactures a wide range of standard powders, which are marketed under the brand names of **CENTRIMAX** and **ISOCOMP**.

CENTRIMAX and **ISOCOMP "ABC" Powders** are the benchmark brands for the so called "multi-purpose" Class A,B,C,E powders. These are the most widely used of all powders around the world. Applications include offices, commercial and public buildings, airports, hotels, retail outlets, workshops, laboratories and hospitals. They are based on Mono-Ammonium Phosphate (MAP) and Ammonium Sulphate (AS) and have the ability to produce a crust on carbonaceous materials helping to prevent re-ignition. Kerr Fire Fighting Chemicals produces a



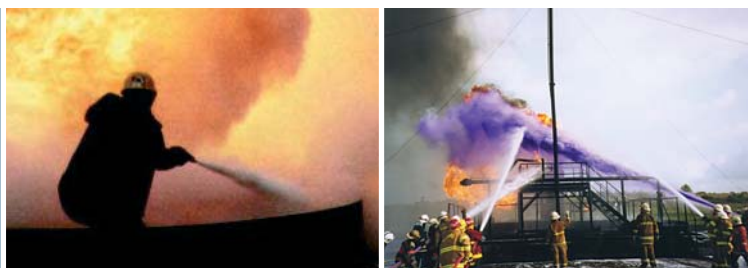
complete range of these powders with MAP content from just 20% to over 90% to meet your requirements.

CENTRIMAX and **ISOCOMP "BC" Powders** are the standard by which other regular Class B,C,E powders are measured.

These are mostly produced using Sodium Bicarbonate (SB). Kerr Fire Fighting Chemicals produces a complete range of these powders with SB contents from just 25% to 98%. Higher performance can be achieved using Potassium Sulphate (PS) or Potassium Bicarbonate (PB). These include the **BC Plus** (PS) range of powders with PS contents of 20% to 90%, and the **Purple K** (PB) range with PB contents of 40% up to 92%.

MONNEX Powder is renowned around the world as the highest performance and most powerful dry chemical powder for all Class B,C,E flammable liquid hazards. It is the discerning users choice for all high risk Petrochemical, Oil and Gas (POG) installations as well as extensive Military and Aviation applications. As with all BC powders, Monnex interferes with the chemical reactions occurring in the combustion zone. The unique property of **MONNEX** is that high temperatures within the combustion zone cause the powder to explode and break down into minute particles. This dramatically increases its surface area for chemical quenching, causing rapid breakdown of the chain reaction of the fire achieving unrivalled speed of control and fire extinction.

Kerr Fire Fighting Chemicals **Metal Fire Powder M28** is specially formulated for use on Class D hazards which are dominated by the intense heat of burning metals. It is based on Sodium Chloride which is highly effective against combustible metals such as Potassium, Sodium, Magnesium and Aluminium.



Extinguishing Efficiency

The Kerr Fire Fighting Chemicals' range of dry chemical powders are specially designed to enable maximum extinguisher ratings to be obtained on the Central European Norm (CEN) EN615 and EN3 standard range of fires. This provides a clear indication of the fire performance of each extinguisher.

The efficiencies / ratings in the tables are the minimum expected according to EN3 when Kerr Fire Fighting Chemicals powders are used in a well designed and EN3 approved extinguisher.

Expected Ratings to EN standard				
BC Powder (CENTRIMAX/ISOCOMP)				
kg	EN3	BC Plus	BC 25	BC
1	21B	21B	21B	34B
2	34B	34B	34B	55B
3	55B	55B	55B	89B
4	70B	70B	70B	113B
6	113B	113B	89B	144B
9	144B	144B	113B	183B
12	183B	183B	144B	233B

Expected Ratings to EN standard						
ABC Powder (CENTRIMAX/ISOCOMP)						
kg	EN3	ABC 20	ABC 30	ABC 40	ABC 70	ABC Plus
1	5A 21B	13B	5A 21B	5A 34B	5A 34B	8A 55B
2	8A 34B	3A 34B	8A 34B	8A 55B	13A 70B	13A 79B
4	13A 70B	8A 70B	13A 89B	21A 113B	27A 144B	27A 183B
6	21A 113B	13A 113B	21A 144B	27A 183B	34A 233B	43A 233B
9	27A 144B	21A 144B	27A 183B	34A 233B	43A 233B	55A 233B
12	43A 183B	27A 183B	34A 233B	43A 233B	55A 233B	55A 233B

Expected Ratings to EN standard		
MONNEX		
Powder kg	Tray Size	Surface Area (m ²)
0.8	89B	2.8
1.5	144B	4.54
2.3	233B	7.32



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Physical Properties

Kerr Fire Fighting Chemicals combines high quality active fire fighting ingredients with careful particle size distribution in its dry chemical powders to achieve high performance and reliability for the user. Special high performance free flowing additives and hydrophobic agents are also added to ensure the best water repellency and minimised risk of powder caking during storage. The result is a range of high performance powders from the world's leading manufacturer which are

easy to handle during the filling operation, give reliable and repeatable efficiency against all types of fires and can safely be stored for prolonged periods and still be expected to work effectively.

Storage

Kerr Fire Fighting Chemicals use special additives to ensure its range of dry chemical powders withstands extreme climatic conditions. The shelf life of these leading powders is in excess of 5 years when stored correctly under dry conditions.

Foam Compatibility

Major applications for Class BCE powders exist in oil and petrochemical refineries, airfield crash trucks and many military applications where dry chemical powders may be used simultaneously with fire fighting foams. This provides rapid knockdown of the fire while the foam secures the area against re-ignition. All these dry chemical powders are protected with special hydrophobic compounds to ensure full compatibility with most modern fire fighting foam concentrates.

Colour

Kerr Fire Fighting Chemicals uses standard colours of white for the Class BCE powders and yellow for the "multi-purpose" Class ABCE powders. A range of other colours are available to meet specific customer requirements.

Toxicity and Corrosivity

All raw materials and finished products are non-toxic. For specific handling guidelines, please refer to the relevant Material Safety Data Sheet (MSDS). In the absence of humidity, all Kerr Fire Fighting Chemicals powders are non-corrosive to metals.

Technical Support

Technical specialists are available to provide advice and assistance on your choice of powders, as well as testing of your filling equipment. Kerr Fire Fighting Chemicals has in-house test facilities and research laboratories offering full support to meet your requirements and any unusual approval applications.

Quality Control

Quality assurance is paramount at Kerr Fire Fighting Chemicals. The manufacturing processes are monitored by a meticulous quality control system ensuring conformity of raw materials, supported by continuous in-process controls. This high level of control ensures a consistently high quality of finished product.

All manufacturing and laboratory operations are accredited to BS EN ISO 9001:2000 and the production plant is accredited to the coveted ISO 14001 Environmental Management standard. All dry chemical powders are manufactured and tested to the EN615 Standard.

Packing

A wide range of packing options are available to meet your specific needs. Individual packs for easy extinguisher filling are available from 1kg to 12kg. For bulk filling, 25kg polyethylene lined multi-walled sacks or 1000kg IBC containers are also widely supplied. Your own special packaging requirements can also be easily accommodated.

The following table is intended as a guide for typical packaging of Kerr Fire Fighting Chemicals dry chemical powders.

Packaging type	Gross palletised weight (kg)	Dimensions (mm)
40x 25kg multiwall paper sacks per nett 1000kg on pallet	1,023	1000 x 1200 x 1000
1000kg nett IBC on pallet	1,023	1023 x 1200 x 1000

Kerr Fire Fighting Chemicals operates a continuous programme of product development. The right is therefore reserved to modify any specifications without prior notice and Kerr Fire Fighting Chemicals should be contacted to ensure that the current issues of all technical data sheets are used.

Kerr Fire Fighting Chemicals

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