Kerr Fire

Monnex™ Dry Chemical Powder

It's what's inside that really matters

MONNEX

MONNEX

What makes Monnex™ so special?

Not just an ordinary powder

Monnex™ BCE powder is the world's most trusted high performance dry chemical powder for high risk firefighting applications. Monnex™ is used in high risk situations where flammable liquids are stored, processed or transported. Monnex™ is also the first choice for airport rescue and firefighting services throughout the world.

Instead of simply mixing ingredients in a vessel, as with most ABC and some BC powders, Monnex™ is manufactured by a complex chemical reaction. Every aspect of the process is managed by Kerr's trained technical specialists.

Kerr Fire's Manufacturing Plant

Step 1 - the optimum reaction

During the production of Monnex™ care is taken to ensure the optimum reaction takes place by using the best quality ingredients. Monnex™ powder is based on a potassium bicarbonate - urea complex and is only manufactured by Kerr Fire at the Kerr facility in the UK.

Step 2 - making it just right

The next step is to feed every batch of the mix into a grinding machine which ensures that each Monnex™ particle is the optimum size for decrepitation (see stage 2 next page) to take place.

Quality Control

All manufacturing process for Monnex™ and quality control systems have been approved by an authorised and independent body to BS.EN.ISO 9001 & 14001.

Approvals and Testing

When Monnex™ is tested in an EN3 rated extinguisher body, it is possible to extinguish a 144B pan fire (4.54m2) with just 1.5kg of powder. When the same test is repeated on a 233B pan (7.23m2), just 2.3kg of powder is used. This demonstrates the power of Monnex™, making the first strike - the only strike.

Applications

Monnex™ dry chemical powder is recommended for high risk environments because when filled in hand held extinguishers, Monnex™ will easily put out fires which would otherwise need wheeled units. Fires are often discovered by plant personnel. At this point rapid extinguishment is essentail. With the speed of Monnex™ first responders can make the vital first few seconds count.

Monnex™ is particularly effective against fires involving L.N.G, alcohols, ketones and esters, which are more difficult for conventional firefighting agents. That is why petro-chemical facilities prefer to use Monnex™ to ensure the safety and security of their sites from fire and accidental ignition.

Aviation requires rapid knockdown of the critical area where passengers and fire crews are present. Monnex™ is especially effective on aviation fuel and achieves a very rapid knockdown.

If it's not "Made in England", it's not Monnex™

Kerr Fire

How does Monnex™ work?

Stage 1 - Release

The distance between the operator and the seat of the fire is key to fighting a fire safely. Every grain of Monnex™ is sized to ensure maximum protection as the content is ejected from the vessel. Too small, and the grains will blow in the wind or stay inside the body, too large and they will not perform to their optimum.

Stage 2 - Decrepitation

Each grain starts to collect the free-radicals which are created as the fire burns. The more of these particles a grain collects the hotter it gets, and this is the point at which Monnex's real power comes alive.

When a grain of Monnex™ reaches a critical temperature within the fire environment it undergoes a unique process called decrepitation. This process is similar to a mini-explosion where the grain of Monnex™ cracks and breaks up into hundreds of smaller particles, thereby increasing the surface area of Monnex™ almost exponentially. The collection of freeradicals starts again.

This is what makes Monnex™ the perfect powder. Monnex™ will perform each time irrespective of the application skills of the operator.

Getting to the heart of the fire

As a material burns it creates free-radicals. These are energised particles which emit heat, making up the third side of what is known as the fire triangle. When a dry chemical powder is introduced into a fire, each grain absorbs these free-radicals. What makes Monnex™ special is its ability to decrepitate. It is this mini explosion which dramatically increases Monnex's surface area, enabling it to mop up more free-radicals than other powders.

Using Monnex™ in approved devices

Flammable liquids

Fire involving flammable liquids such as petrol, diesel, oils, kerosene, etc.

Flammable gases

Fire involving flammable gases such as propane, hydrogen, methane, natural gas etc.

Electrical Fires

Fire involving electrical items such as fuse boxes, computers, transformers, etc.

Installed systems

Large capacity Monnex™ systems can be installed on fire trucks with discharge via a high capacity hose reel or through a dual agent nozzle. For high risk areas such as loading jetties, fixed systems may be installed; delivering high performance Monnex™ directly where it is needed most.

Hand-held fire extinguishers

A fire extinguisher is often the first thing a responder uses to ensure a small fire does not grow in size and intensity and turn into a full-scale emergency. By using Monnex™ in all high risk areas workers not only have the best chance of self evacuation, but also can tackle the fire with the best prospect of success. Make sure it's Monnex™ inside. to make the first strike count.

Wheeled units

Mobile extinguishers such as the 20-100kg trolley units filled with Monnex™ are the preferred choice for high risk process or storage areas, as well as aircraft stands and tunnel systems. With low maintenance and high performance features these units can hold large amounts of dry powder.

Monnex™ - It's what's inside that really matters

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