



STRIKE

WHEN THE IRON

IS HOT




METAL FIRE EXTINGUISHERS





THE SUPERHEATED FIRE



Metal Fires or fire arising in super-heated metals are one of the most deadly and volatile type of fire. Metal fire occurs at extremely high temperatures, as high as thousands of degree centigrade. Multipurpose extinguishers are ineffective and

at time dangerous too if used on metal fires. To quell these superheated fires, specialised agent is required that can work on such high temperature & volatile fires.

UNDERSTANDING THE ENEMY

Here's what makes metal (Class D) fires so dangerous. Magnesium, Potassium, Sodium, Titanium, Uranium and Calcium are among the most flammable metallic elements found on earth. In their dust or molten states, these metals ignite very easily. Once ablaze, these elements can reach temperatures of up to

5000°C within seconds. And industries that use these metals – aircraft, paint, explosive and steel manufacturing – are already at a high risk of fire.

A summary of some of the most reactive metals and the dangers they pose:

| Metal | Danger | Reaction |
|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Magnesium | Highly flammable in powder form | Reduces water to highly flammable Hydrogen gas |
| Sodium | Low melting point, making it extremely reactive | Violent reaction with air, causing Sodium to melt and spread fire |
| Potassium | Ignites at room temperature in powder form | Reacts violently with water, producing Hydrogen gas and Potassium Hydroxide (KOH). The resulting exothermic reaction can ignite the Hydrogen |
| Caesium | Highly explosive and reactive metal | Explodes on contact with water. Can also react with solid water at temperatures as low as -116°C |
| Lithium | Reacts with Nitrogen gas in normal conditions | Ignites and burns in air when exposed to water or water vapours |

THE BIGGEST DANGER

Using the wrong extinguishing agent on a Class D fire may cause more damage than the fire itself. Other than the extreme threat that all metal fires pose, one common characteristic is that all of them react violently, often exploding, when they come in contact with water. So what is the solution to a raging metal fire?

The National Fire Prevention Association (NFPA), a panel of experts on fire safety and prevention, recommends Dry Powder extinguishing agents. These extinguishing agents have a blanket-effect on the fire and smother the flames by absorbing the heat.

THE CEASEFIRE SOLUTION

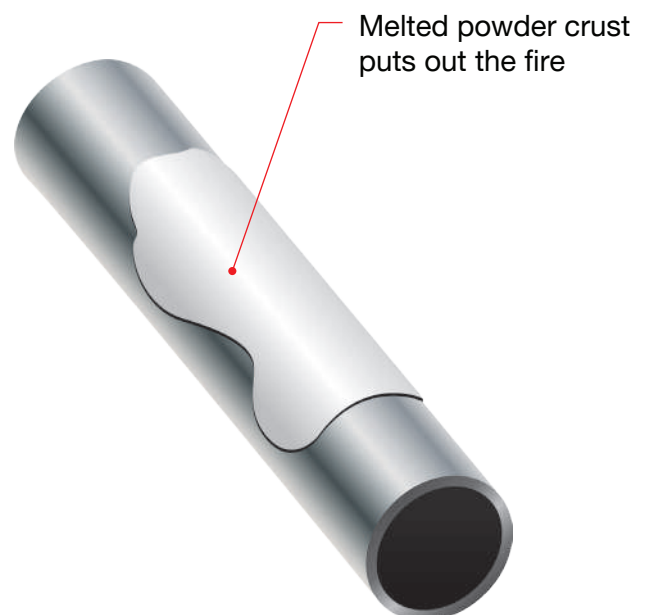
Ceasefire's answer to these infernos are the Ceasefire Speciality Powder for Metals: TEC (SPM-TEC) and the Ceasefire Speciality Powder for Metals: PPYRO (SPM-PYRO). These extinguishers are so powerful, they stop metal fires. Dead in their tracks. Within minutes.



HOW IT WORKS

Metal fires can burn anywhere between 600° and 5000°C. This temperature causes the molecules in a powder extinguishing agent to melt, and then fuse. This process forms a hard crust on the surface of the metal, cutting off oxygen supply to the fire. With this immediate

decrease in temperature and lack of oxygen, the fire is extinguished in seconds. The Ceasefire Speciality Powder for Metals (SPM) stops the chemical chain reactions and kills fire instantly.



CEASEFIRE SPECIALITY POWDER FOR METALS: TEC (SPM-TEC)

Ceasefire Speciality Powder for Metals: TEC (SPM-TEC) uses a specially formulated powder agent based on a mixture of 3 metal chlorides – Sodium, Potassium and Barium. It is then chemically treated to make it easy to spray through a nozzle, and make it water-repellent. Ideal for fighting lighter metal fires in the range

of 500°-2000°C, Ceasefire SPM- TEC melts at 550°C and the particles fuse to form a crust at 600-650°C. Conforming to world class manufacturing quality standards, Ceasefire SPM-TEC offers a reliable and revolutionary solution to fighting metal fires. It can also be used to effectively combat small oil fires.

FEATURES

Ideal combatant against Aluminium, Zinc, Sodium, Magnesium, Francium, Lithium, Potassium, Rubidium and Caesium.

Manufactured by Ceasefire according to the highest international quality and safety standards



Deep drawn mild steel container



Controllable discharge Mechanism



Highly Effective



Five Years Warranty



Equipped with Schraeder Valve and Pressure Relief Valve



Available sizes: 4kg, 6kg, 9kg



CEASEFIRE SPECIALITY POWDER FOR METALS: PYRO (SPM-PYRO)

The temperatures that some metal fires can reach make them hard to combat with Ceasefire SPM-TEC. This is where Ceasefire Speciality Powder for Metals - Pyro (SPM-PYRO) comes in. Metals such as Plutonium, Titanium, Zirconium can react and burn at temperatures in excess of 5000°C. Made from a formulation of Chloride and

Phosphate-based powder, Ceasefire SPM-PYRO is designed specifically to combat metal Fires at higher Temperatures. Ceasefire SPM-PYRO melts and fuses at ~1200°C, making it extremely effective against Alkali metal fires, as well as metal fires such as Plutonium, Titanium, Lead, Copper, Tungsten, Cobalt and Manganese.

FEATURES

Ideal combatant against fires involving heavy metals, alkali metals and their alloys

Manufactured by Ceasefire according to the highest international quality and safety standards



Deep drawn mild steel container



Controllable discharge Mechanism



Highly Effective



Five Years Warranty



Equipped with Schraeder Valve and Pressure Relief Valve



Available sizes: 4kg, 6kg, 9kg

RECOMMENDED USAGE

Ceasefire SPM-TEC and Ceasefire SPM-PYRO are ideal solutions to combat fires involving metals in a variety of locations and applications:

- Shipping
- Batteries
- Ceramics
- Glass
- Petrochemicals
- Research Laboratories
- Atomic Energy Complexes
- Ports
- Metallurgical and Alloy-manufacturing Industries
- Pharmaceuticals
- Coolants
- Fertilisers
- Soaps
- Automobile and Engine-manufacturing
- Aerospace
- Fireworks and Explosives

TECHNICAL SPECIFICATIONS

| Nomenclature For Portable Fire Extinguisher | Metal Fire Ext. SPM TEC 4kg MS SP Red | Metal Fire Ext. SPM TEC 6kg MS SP Red | Metal Fire Ext. SPM TEC 9kg MS SP Red | Metal Fire Ext. SPM PYRO 4kg MS SP Red | Metal Fire Ext. SPM PYRO 6kg MS SP Red | Metal Fire Ext. SPM PYRO 9kg MS SP Red |
|---------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|
| Stored Pressure / Cartridge | Stored Pressure | Stored Pressure | Stored Pressure | Stored Pressure | Stored Pressure | Stored Pressure |
| Agent | SPM TEC | SPM TEC | SPM TEC | SPM PYRO | SPM PYRO | SPM PYRO |
| Agent Category | Metal Powder | Metal Powder | Metal Powder | Metal Powder | Metal Powder | Metal Powder |
| Product Code | CF-000043 | CF-000044 | CF-000045 | CF-000040 | CF-000041 | CF-000042 |
| Certification Type | PED | PED | PED | PED | PED | PED |
| PED | Yes | Yes | Yes | Yes | Yes | Yes |
| UKCA-PED | Yes | Yes | Yes | Yes | Yes | Yes |
| Gross Weight (approx) | 7.20 kg | 9.65 kg | 14.05 kg | 7.20 kg | 9.65 kg | 14.05 kg |
| Net Mass (approx.) | 4 kg | 6 kg | 9 kg | 4 kg | 6 kg | 9 kg |
| Height of Fire Ext. (approx) | 440 mm | 485 mm | 615 mm | 440 mm | 485 mm | 615 mm |
| Discharge Mechanism | Squeeze Grip | Squeeze Grip | Squeeze Grip | Squeeze Grip | Squeeze Grip | Squeeze Grip |
| Applicable On Fires | D | D | D | D | D | D |
| Can Construction | Deep Drawn And MIG Welded | Deep Drawn And MIG Welded | Deep Drawn And MIG Welded | Deep Drawn And MIG Welded | Deep Drawn And MIG Welded | Deep Drawn And MIG Welded |
| Valve / Cap Construction | Forging And Machining | Forging And Machining | Forging And Machining | Forging And Machining | Forging And Machining | Forging And Machining |
| Schraeder Valve | Yes | Yes | Yes | Yes | Yes | Yes |
| Pressure Relief Valve | Yes | Yes | Yes | Yes | Yes | Yes |
| Internal Coating | Epoxy Powder Coating | Epoxy Powder Coating | Epoxy Powder Coating | Epoxy Powder Coating | Epoxy Powder Coating | Epoxy Powder Coating |
| External Coating | Epoxy Polyester Powder | Epoxy Polyester Powder | Epoxy Polyester Powder | Epoxy Polyester Powder | Epoxy Polyester Powder | Epoxy Polyester Powder |
| Helium Leak Detection Testing | Yes | Yes | Yes | Yes | Yes | Yes |
| Warranty In Years | 5 | 5 | 5 | 5 | 5 | 5 |
| G.A. Drawing Number | CF/SP-4T/GA/02 | CF/SP-6T/GA/02 | CF/SP-9T/GA/02 | CF/SP-4P/GA/02 | CF/SP-6P/GA/02 | CF/SP-9P/GA/02 |
| Working Pressure | 15 Bar | 15 Bar | 15 Bar | 15 Bar | 15Bar | 15 Bar |
| Dia. Of Shell (OD) | 140 mm | 160 mm | 175 mm | 140 mm | 160 mm | 175 mm |
| Operating Temperature | -30° C to +60°C | -30° C to +60°C | -30° C to +60°C | -30° C to +60°C | -30° C to +60°C | -30° C to +60°C |
| Hydrostatic Test Pressure | 35 Bar | 35 Bar | 35 Bar | 35 Bar | 35 Bar | 35 Bar |
| Cylinder Material Spec. | Steel CR2(DC01) | Steel CR2(DC01) | Steel CR2(DC01) | Steel CR2(DC01) | Steel CR2(DC01) | Steel CR2(DC01) |
| Body Thickness | 1.2 mm | 1.4 mm | 1.4 mm | 1.2 mm | 1.4 mm | 1.4 mm |

* Please check the product specifications at the time of placing your order from our website (address of which is given at the end of this catalogue). Regular R&D and product improvisations may lead to change in product specifications in this catalogue, without any prior notice



FIGHTS CLASS

D

STANDARDS

PED

CERTIFICATIONS

CE₁₁₂₈UK
CA

CERTIFYING BODY



CEASEFIRE DESIGN CELL :

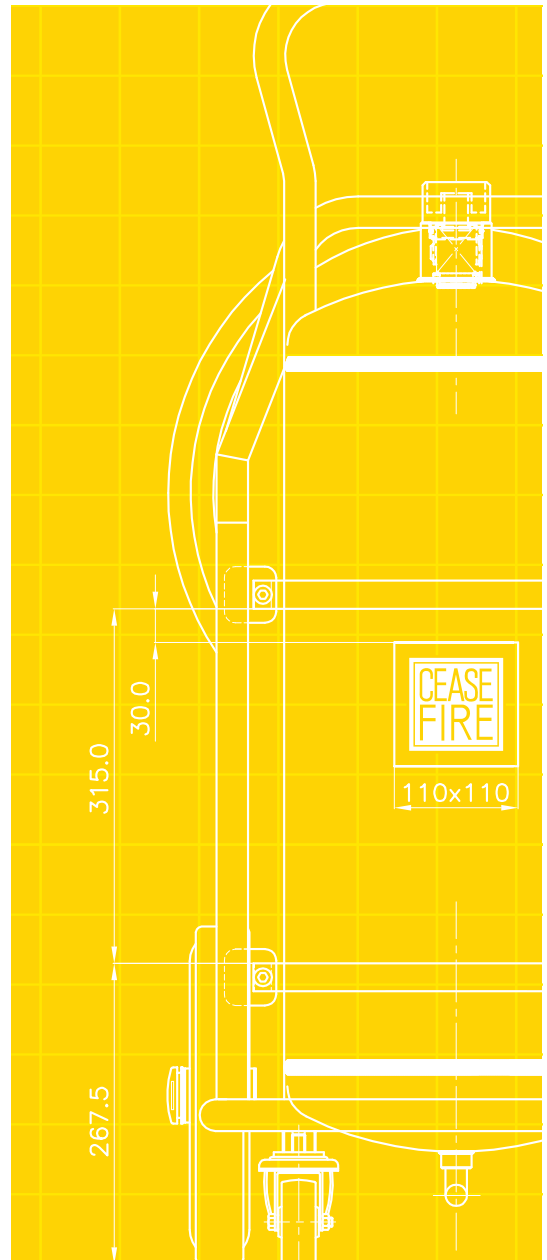
No two premises are alike. By offering the most flexible system configurations in the industry, Ceasefire provides the most efficient protection for facilities. Believing that the most effective fire solutions are the ones that are customised according to the unique characteristics of the area being protected, Ceasefire has established the Ceasefire Design Cell (CDC).

Functioning as the single touch point for all fire safety needs, CDC is manned by fire experts and managers with years of experience in fire safety under their belts. As a part of Ceasefire's 360 degree protection solution, the Ceasefire Technical Survey team visits your facility and conducts a detailed study to understand its vulnerabilities and requirements. They survey the premises and work out requirement based on fire threats in the room.

Once it has been finalised, Ceasefire's expert Installation Team oversee installation and testing. The Ceasefire Team also trains you and your staff to use the fire safety system.

Benefits:

- An exhaustive planning process, executed by engineers with years of experience.
- State-of-the-art solutions and products in association with world leaders.
- Design and installation of your System overseen by professionals, ensuring delivery of a high quality & reliable system.



CEASEFIRE NOW

360° lifesaving fire safety solutions. More than 3,000 new customers a month. A product sold every 61 seconds. A life saved every 5 minutes. Presence in over 300 cities and towns. Backed by a team of more than 2,000. 400 lifesaving products – from green fire extinguishers that can tackle any kind of fire to first of its kind automatic fire extinguisher to most advanced independent suppression systems – Ceasefire has it all. We're equipped and ready to protect your premises.



**POWDER
FIRE EXTINGUISHER**
4 KG CLASS D POWDER

1. PULL OUT THE SAFETY PIN.
2. EXTEND THE HANDLE TO AIM THE NOZZLE ON TOP OF THE FLAME SOURCE, DEPRESS THE LEVER FROM A DISTANCE OF 1 METER.

FOR USE ON FIRES INVOLVING:



CE 1128

UK
CA

CEASEFIRE INDUSTRIES PVT.LTD.
E-4, BELAQU INDUSTRIAL AREA,
DENRAJUN-248011, UTTARAKHAND, INDIA



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**POWDER
FIRE EXTINGUISHER**
6 KG CLASS D POWDER

1. PULL OUT THE SAFETY PIN.
2. EXTEND THE HANDLE TO AIM THE NOZZLE ON TOP OF THE FLAME SOURCE, DEPRESS THE LEVER FROM A DISTANCE OF 1 METER.

FOR USE ON FIRES INVOLVING:



CE 1128

UK
CA

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Scan the QR code
to visit our website

Website : www.ceasefire.co.uk

Follow us on:



Please check the product specifications at the time of placing your order. Specifications can change without notice due to our continuous R&D and product improvisation initiatives.