

STRIKE

WHEN THE IRON



METAL FIRE EXTINGUISHERS







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

N

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

J

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 Aloymanufacturing Industries
- Pharmaceuticals
- Coolants
- Fertilisers

- Soaps
- Automobile and Enginemanufacturing
- 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
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			
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	6	6	6	6	6	6
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



CERTIFYING BODY



CEASEFIRE DESIGN CELL:

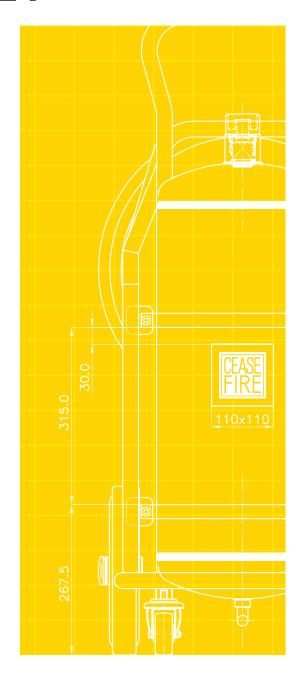
No two premises are alike. By offering the most flexible system configurations in the industry, Ceasefire provides the most efficient protection for facilities. Believing that the most effective fire solutions are the ones that are customised according to the unique characteristics of the area being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



Ceasefire Industries Private Limited

B1/H1, 2nd Floor, Mohan Cooperative Industrial Estate, Mathura Rd, New Delhi - 110044



Website: www.ceasefire.in

Follow us on: f (You to in p











TO PLACE AN ORDER, PLEASE CONTACT: