



**STRIKE
WHEN THE IRON
IS HOT**







The biggest mistake most people make when it comes to a metal fire is underestimating it. Miscalculating the speed at which it can spread and the ease with which it can engulf everything in its path. This lack of knowledge destroys thousands of lives and property worth millions, every year. Because the fact is, you can't defeat what you don't understand.



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: Pyro (SPM-PYRO). These are extinguishers so powerful, they stop metal fires. Dead in their tracks. Within minutes.



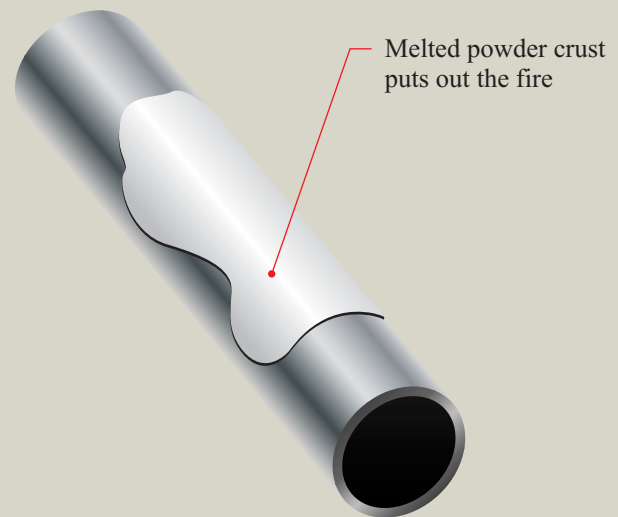
HOW IT WORKS

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



Here's a closer look at the variants; Ceasefire Speciality Powder for Metals :TEC (SPM-TEC) to fight metals like Magnesium, Aluminium , Zinc, Sodium, Potassium,

immediate decrease in temperature and lack of oxygen, the fire is extinguished in seconds. The Ceasefire Speciality Powder for Metals (SPM) also stops chain reactions which help the flames spread rapidly and cause tremendous damage.



Francium, Rubidium, Lithium and Caesium; and Ceasefire Speciality Powder for Metals: Pyro (SPM-PYRO), to combat metals like Titanium, Plutonium and Zirconium.



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

 Instalert*

 Safety Seal

 Five Year Warranty

Available sizes: 4kg, 6kg, 9kg

** This feature is available as optional at cost.*



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

 Instalert*

 Safety Seal

 Five Year Warranty

Available sizes: 4kg, 6kg, 9kg

* This feature is available as optional at cost.



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



Think safety, think Ceasefire. Ceasefire's range of products

FIRE SAFETY PRODUCTS

FIRE EXTINGUISHERS



- Clean Agent
- Powder
- Water
- Foam
- CO₂
- Hydro Pyroquell System - CHPS
- Watermist
- Fire Extinguisher Strolley
- Bike Mounted Kit Watermist Cabs
- Greenmist Extinguisher
- New Insta-alert
- Home Safety



FIRE EXTINGUISHERS - SYSTEMS



- Ceasefire Quick Response System (CQRS)
- Hydrant 2000 & 3000
- Single Fluid Generator Auto-Quell System
- Single Fluid Transformer Auto-Quell System
- Kitchen Suppression System
- Indoor Auto-Quell System
- Flooding System SWIFT
(Self activated watermist instant flooding technology)
- FM 200 Flooding System



SMOKE DETECTION SYSTEMS



- Wireless
- Uni-wireless fire alarm system
- Wired
- Standalone

ESCAPE SIGNS & DIRECTIONAL LIGHTING SYSTEMS



- Photoluminescent
- LED
- Escape Gear

FIRE SUITS



- Proximity Suits
- Entry Suits
- Industrial Suits

SECURITY SOLUTIONS



- CCTV
- Security Systems for large and small premises
- Video Door Phones
- Access Control Systems
- Perimeter Security Systems
- IP Surveillance Systems

- For years now, we have been India's No.1 fire safety brand.
- Every 9 minutes, Ceasefire products save a life.
- Every 61 seconds a Ceasefire Product is sold in India.

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