



PROTECT YOUR ASSETS FROM

FIERCE LITHIUM BATTERY FIRES



**CEASEFIRE LITHIUM-ION BATTERY
PORTABLE & WHEELED FIRE EXTINGUISHERS**

CEASEFIRE LITHIUM BATTERY EXTINGUISHERS





REVOLUTIONISING SAFETY FOR MODERN CHALLENGES

The rapid development of technology has led to the widespread adoption of lithium-ion batteries in more ways than one. While these batteries have revolutionised the way we power our modern world and have

become increasingly ingrained in our daily routines, finding applications in laptops, smart phones, tablets, electric vehicles, and more, these also pose a fire risk that needs an all new approach to firefighting.

THE HIDDEN DANGER OF LITHIUM-ION BATTERIES

On one hand, where lithium-ion batteries boast numerous advantages, including high energy density, extended durability, and swift recharging capabilities, these batteries also contain flammable electrolytes, making them susceptible

to thermal runaway and potential ignition when subjected to physical damage, overcharging, or manufacturing defects. Fires in batteries pose such a tremendous challenge that all conventional methods of firefighting fail to address this challenge.



Risks Associated With Lithium-ion Batteries



Fire: Lithium-ion batteries can catch fire if they are damaged, overcharged, or short-circuited.



Thermal runaway: This can result from overcharging, over-discharging, or overheating li-ion batteries during use/recharge.



Toxic fumes: Lithium-ion batteries can release toxic fumes if they are damaged or burned.



Environmental impact: Lithium-ion batteries are not environmentally friendly to produce or dispose of.

Fire Facts

The Indian Institute of Fire Engineers (IIFE) reported that there were 100 lithium-ion battery fires in India in 2022.

BECAUSE LITHIUM ION BATTERY FIRES NEED SPECIAL FIRE FIGHTERS

The distinctive characteristics of fires involving lithium-ion batteries demand specialised fire-fighting solutions as these fires have a heightened potential for re-ignition. Traditional fire-fighting methods may prove ineffective in dealing with such incidents which stem from the fact that lithium-ion batteries house inflammable electrolytes, which can react with water or foam, potentially exacerbating the situation.

What's needed is a solution that not only rapidly cools the affected area but also provides a protective blanketing effect over the batteries, preventing re-ignition. Ceasefire offers the most effective solution for combating such fires.

Specifically engineered for Lithium-Ion Battery fires, Ceasefire li-ion battery fire extinguishers provide a versatile and comprehensive fire extinguishing capability. Our gel-based agent not only swiftly and effectively combats lithium battery fires but also stands out as an environmentally conscious choice. Engineered to rapidly cool and encapsulate the flames, this biodegradable agent with no PFOS / PFAS minimises damage to the surrounding environment.

Ceasefire Lithium-ion Battery Fire Extinguishers are also user-friendly, making them well-suited for both residential and commercial use.



FIGHTS CLASS



STANDARDS



CERTIFICATIONS



CERTIFYING BODY



HOW DO CEASEFIRE LITHIUM BATTERY FIRE EXTINGUISHERS WORK?







Ceasefire lithium ion battery fire extinguishers use a specialised gel-based blanketing agent. The water content of the agent cools the fire, while the specialised extinguishing component encapsulates the fuel source creating a thermal barrier to prevent propagation of the fire.

What sets it apart is its eco-friendly composition, which is tailored to effectively extinguish

lithium-ion battery fires with a minimum adverse impact on the environment. This specialised agent offers remarkable advantages. The agent can be effortlessly sprayed onto the fire, swiftly forming a cooling and airtight layer eventually encapsulating the flames. Moreover, battery fires doused with this agent have an additional advantage of a significantly reduced risk of reignition.



Special Agent Properties

	Specialised gel agent		Non-toxic
	No PFAS/PFOS		100% biodegradable
	Environment friendly		Also effective on Class A fire

Fire Facts

In 2020, there were over 100 reported lithium battery fires in the United Kingdom.
 -UK Fire Services College

HOW THE SPECIALIST DOES THE JOB?

Suppresses Flammability:

The gel based agent that encapsulates flammable corrosive electrolyte and rapidly absorbs thermal energy from high temperature battery fire flames. This successfully halts cell-to-cell ignition, also known as thermal runaway propagation.



Controls Explosivity:

The agent ceases the production of explosive off-gases emitted by burning lithium ion batteries, such as Hydrogen (H₂), Methane (CH₄), and Ethylene (C₂H₄). This is especially important while extinguishing lithium ion battery fires within enclosed environments, such as apartments, data centres, aircraft cabins, energy storage systems, electric vehicles, and more.

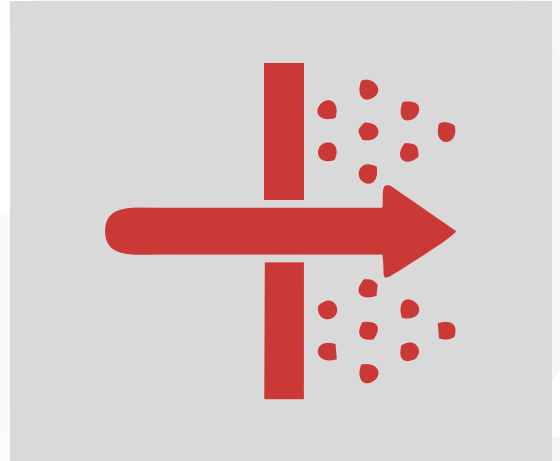
Reduces Toxicity:

The agent is able to contain toxic and combustible gases such as hydrogen fluoride that can spew out of the battery by creating an encapsulating layer. This renders the liquid non-flammable even during clean up and shields persons from inhalation of these gases.



Penetration:

The surface tension of water is reduced considerably when the gel based agent is added. This makes it easier for the agent to penetrate in the battery openings wherever possible to extinguish the fire effectively.



Effective on vertical surfaces:

With a unique consistency of the stable water based firefighting gel it makes the agent effective even on vertical surfaces.



Fire Facts

According to the National Fire Protection Association (NFPA), there were over 300 reported lithium battery fires in the United States in 2021

EXTENSIVE RANGE OF SIZES & MODELS

With size variants ranging from 2, 3, 6, 9 ltrs and special models in 9 ltrs and 50 ltrs, the range is

tailored to match diverse fire scenarios.



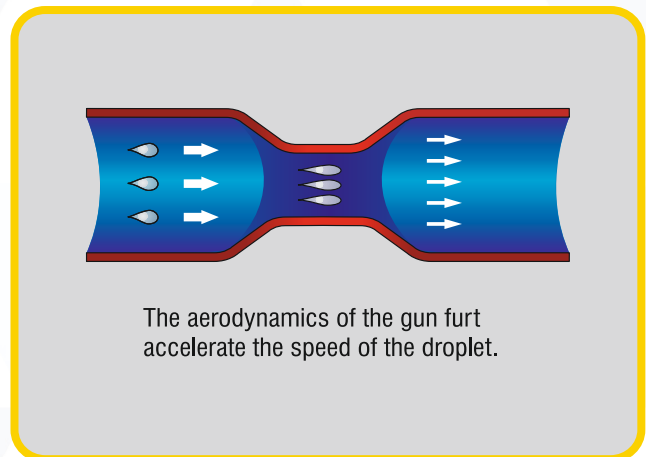
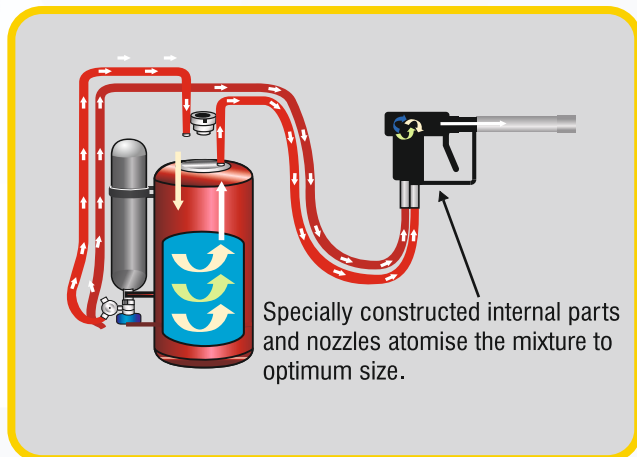
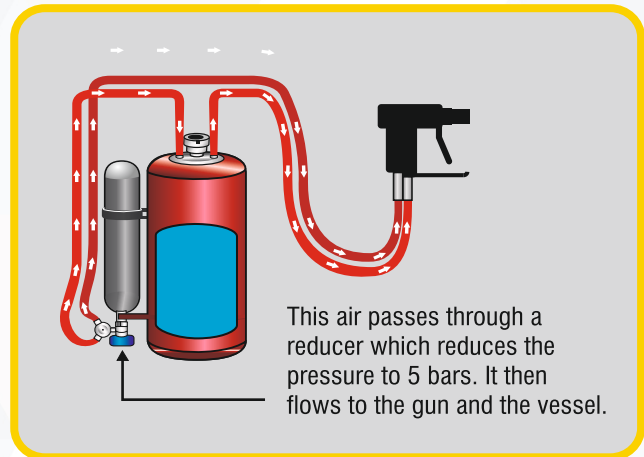
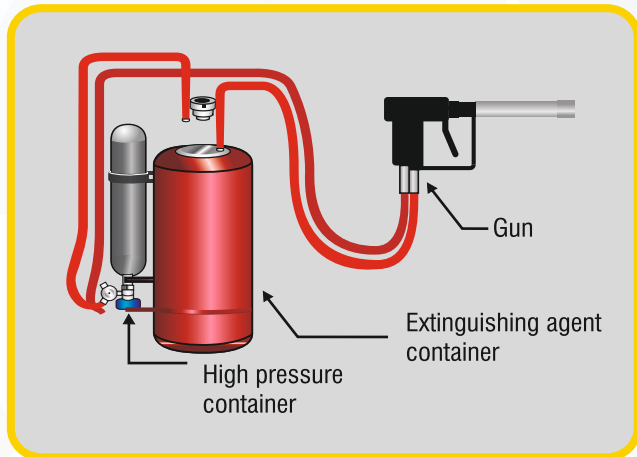
Special Models

A flagship feature of the range are the special 9ltrs and 50 ltrs variants which come in unique back-pack and trolley-mounted designs and are powered by external compressed air cartridges and specialised guns which can easily shift from a jet discharge mode to a Spray mode with a simple turn of the bezzle.

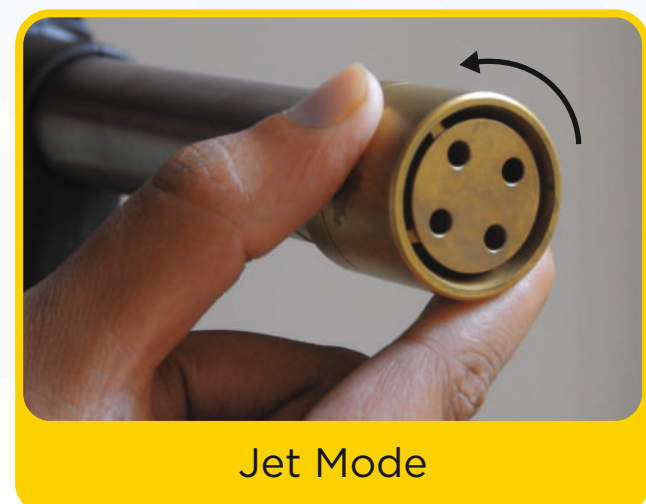
These specialised variants in the Ceasefire Lithium-ion range bring in incredible power and versatility adding a huge throw of the extinguishers, that aids in the safety of the fire fighter.














ADDING THAT EXTRA POWER WHEN YOU NEED IT THE MOST.



The Double Phase Extinguishing Gun With Adjustable Nozzle



KEY FEATURES

	Works on Class A and Lithium battery fires
	Controllable discharge mechanism
	Portable and lightweight
	Long shelf life
	State-of-the-art pressure gauge
	Easy to remove safety pin
	PED certified
	Biodegradable Agent
	Environment friendly
	NO PFAS/ PFOS
	6 years warranty



Fire Facts

The Battery Council International (BCI) estimates that the global cost of lithium battery fires exceeds \$1 billion annually.

CEASEFIRE LITHIUM BATTERY EXTINGUISHERS

TECHNICAL SPECIFICATIONS:

Nomenclature For Portable Fire Extinguisher	Fire Ext. Lithium Battery 2 ltr MS SP Red	Fire Ext. Lithium Battery 3 ltr MS SP Red	Fire Ext. Lithium Battery 6 ltr MS SP Red	Fire Ext. Lithium Battery 9 ltr MS SP Red
Operating Mechanism	Stored Pressure	Stored Pressure	Stored Pressure	Stored Pressure
Agent	Water Based Fire Fighting Gel	Water Based Fire Fighting Gel	Water Based Fire Fighting Gel	Water Based Fire Fighting Gel
Product Code	CF-001597	CF-001598	CF-001599	CF-001600
Certification Type	PED	PED	PED	PED
PED	Yes	Yes	Yes	Yes
Gross Weight (approx.)	4.5 kg	5.9 kg	9.5 kg	13.3 kg
Net Mass (approx.)	2 ltr	3 ltr	6 ltr	9 ltr
Approx. Height Of Fire Ext.	345 mm	445 mm	520 mm	615 mm
Discharge Mechanism	Squeeze Grip	Squeeze Grip	Squeeze Grip	Squeeze Grip
Applicable On Fires	Class A & Li-Battery	Class A & Li-Battery	Class A & Li-Battery	Class A & Li-Battery
Fire Ratings	1A	1A	2A	3A
Battery Fire Ratings	350 W/h	600 W/h	900 W/h	1200 W/h
Can Construction	Deep Drawn & MIG Welded	Deep Drawn & MIG Welded	Deep Drawn & MIG Welded	Deep Drawn & MIG Welded
Valve / Cap Construction	Forging & Machining	Forging & Machining	Forging & Machining	Forging & Machining
External Coating	Epoxy Polyester Powder	Epoxy Polyester Powder	Epoxy Polyester Powder	Epoxy Polyester Powder
Warranty In Year	6	6	6	6
Working Pressure	15 bar	15 bar	15 bar	15 bar
Dia. Of Shell (OD)	108	140	160	175
Operating Temperature	from +5°C to +60°C	from +5°C to +60°C	from +5°C to +60°C	from +5°C to +60°C
Hydrostatic Test Pressure	35 bar	35 bar	35 bar	35 bar
Body Thickness	1.2 mm	1.2 mm	1.4 mm	1.4 mm
Min. Discharge Time	8 sec	9 sec	12 sec	15 sec
Min. Throw Distance	2 m	2 m	2 m	2 m

TECHNICAL SPECIFICATIONS:

Nomenclature For Portable Fire Extinguisher	Lithium Battery Compressed Air Fire Extinguisher - 9 Ltr SS CT Red	Lithium Battery Compressed Air Fire Extinguisher - 50 Ltr SS CT Red
Operating Mechanism	Cartridge	Cartridge
Agent	Water Based Fire Fighting GEL	Water Based Fire Fighting GEL
Product Code	CF-001593	CF-001594
Certification Type	PED, UKCA PED	PED, UKCA PED
PED	Yes	Yes
UKCA-PED	Yes	Yes
Gross Weight (approx.)	25.03 kg	102.50 kg
Net Mass (approx.)	9 ltr	50 ltr
Approx. Height Of Fire Ext.	575 mm	1200 mm
Discharge Mechanism	Squeeze Grip Gun	Squeeze Grip Gun
Applicable On Fires	Class A & Li-Battery	Class A & Li-Battery
Fire Ratings	21A	A
Battery Fire Ratings	1500 W/h	3000 W/h
Can Construction	Deep Drawn & MIG Welded	Drawn Rolled And MIG Welded
Valve / Cap Construction	Machining	Machining
External Coating	Epoxy Polyester Powder	Epoxy Polyester Powder
Warranty In Years	1	1
Working Pressure	8 bar	8 bar
Dia. Of Shell (OD)	204 mm	300 mm
Hydrostatic Test Pressure	30 bar	30 bar
Body Thickness	1.5 mm	2 mm
Min. Discharge Time	42 sec	120 sec

APPLICATION AREAS

Common examples of Lithium Battery powered utilities and durables used in day-to-day life with

their corresponding watt hours and recommended Ceasefire Lithium Battery Extinguishers.

PHONES

WATT HOURS RANGE - 15 to 20 Whs

CEASEFIRE RECOMMENDS

Variant(s)

Lithium Battery Fire Extinguisher	500 ml
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LAPTOPS

WATT HOURS RANGE - 60 to 70 Whs

CEASEFIRE RECOMMENDS

Variant(s)

Lithium Battery Fire Extinguisher	500 ml and 1 ltr
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CAMERAS

WATT HOURS RANGE - 86 to 150 Whs

CEASEFIRE RECOMMENDS

Variant(s)

Lithium Battery Fire Extinguisher	1 ltr
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LIGHTS

WATT HOURS RANGE - 200 to 400 Whs

CEASEFIRE RECOMMENDS

	Variant(s)
Lithium Battery Fire Extinguisher	2 ltrs and 3 ltrs



E-CYCLE

WATT HOURS RANGE - 250 to 750 Whs

CEASEFIRE RECOMMENDS

	Variant(s)
Lithium Battery Fire Extinguisher	2 ltrs, 3 ltrs and 6 ltrs

E-BIKE

WATT HOURS RANGE - 2.5 to 4.5 kWhs

CEASEFIRE RECOMMENDS

	Variant(s)
Lithium Battery Fire Extinguisher	50 ltrs



E-CAR

WATT HOURS RANGE - 24 to 45 kWhs

CEASEFIRE RECOMMENDS

	Variant(s)
Lithium Battery Fire Extinguisher	50 ltrs

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