

# Case Study



LIFESAFE PTSG's game-changing portable fire extinguisher





## PTSG's game-changing portable fire extinguisher



In a world where the threat of fire is increasingly complex, especially with the rapid growth in Lithium-ion battery use, fire safety needs a fundamental shift. Trinity Fire & Security Ltd, part of Premier Technical Services Group Ltd's (PTSG) Fire Solutions division, has answered that call. In collaboration with LifeSafe Technologies, Trinity has launched the Trinity MPF (Multi-Purpose Fluid) Portable Fire Extinguisher — a cutting-edge solution designed to tackle a broader range of fire types than any conventional extinguisher on the market today.

This innovative product doesn't just raise the bar in performance; it resets the standard. Certified by BSI and compliant with NTA8133:2021 (the Lithium-ion battery fire test), the Trinity MPF removes uncertainty during emergencies by replacing multiple traditional units with one universal extinguisher. The result: faster, more effective response and safer environments.

The common issues with traditional fire extinguishers

- Many organisations currently use multiple types of extinguishers, each of which is limited in terms of the types of fires they are tested against and certified to extinguish.
- Relatively few people are trained in using fire extinguishers. In the stress of a fire, people panic and use the wrong unit or they don't use one at all as they lack the confidence.
- Lithium-ion battery fires are an increasingly common problem, which can only be dealt with using an extinguisher specifically designed for that purpose.
- There is a need to replace AFFF foam extinguishers. The C8 AFFF does not degrade easily and will be banned by July 2025. The C6 AFFF is expected to be banned by 2030.
- All of the above points mean that the fire strategy in most organisations isn't as effective or environmentally friendly as it could be.



### PTSG's game-changing portable fire extinguisher

#### A Solution Born from Partnership and Innovation

Trinity's innovation journey began with a clear ambition: develop a single extinguisher capable of tackling the widest range of fire classes, including the elusive Lithium-ion battery fires. Working in partnership with LifeSafe Technologies — a leader in compact fire safety solutions — Trinity invested over 18 months into developing the MPF.

The result is an extinguisher that combats the following fire types:

- Class 34A (solid combustibles)
- Class 34B (flammable liquids)
- Class 75F (cooking oils and fats)
- Di-electric up to 1,000 volts
- Lithium-ion battery fires

This all-in-one capability is a game-changer for facilities managers and risk assessors. No more guesswork in a fire emergency — one extinguisher does it all.

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#### Safety That Meets and Exceeds Standards

A standout feature of the Trinity MPF is its fluid technology. The patented formula creates an endothermic reaction that absorbs heat energy — dramatically cooling the fire — while simultaneously suppressing oxygen at a molecular level (exo-suppression), preventing reignition. Together, these two effects disrupt the fire triangle and ensure more complete extinguishment.

The MPF is the first portable extinguisher certified by BSI to pass the rigorous NTA8133:2021 standard for Lithium-ion battery fires. Additionally, it has been tested and verified by TÜV (Germany's Technical Inspection Association) to operate in extreme environments — from -15°C to 60°C — far beyond the +5°C minimum allowed by EN3 certification. This makes it suitable for cold storage, transport depots, and external installations.

#### Aligned with a Greener Future

Environmental impact is another key factor. Legacy extinguishers, particularly those using Aqueous Film Forming Foam (AFFF), are under increasing scrutiny. The C8 variant of AFFF, which contains PFOA, is due to be banned by July 2025, and the C6 (PFAS-based) by 2030.

The Trinity MPF is completely PFOA- and PFAS-free, offering an environmentally sound alternative that is compliant with current and upcoming legislation. It also carries Sedex (Supplier Ethical Data Exchange) certification, ensuring the ethical sourcing and supply of components — a growing concern for responsible procurement officers.

By replacing multiple extinguisher types with a single, sustainable unit, the MPF not only reduces the carbon footprint of production and distribution but also slashes operational costs and storage demands.