



SPECIFICATION OF LITHIUM-ION BATTERY FIRE BLANKET

LITHIUM-ION BATTERY FIRE

Lithium-ion batteries are becoming increasingly prevalent as they power a wide range of modern devices. From mobile phones and computers to garden tools and electric vehicles, these high-energy batteries offer a clean and environmentally friendly energy source.

However, due to their construction, lithium-ion batteries have the potential to catch fire, leading to a rise in battery-related fires. These fires present several associated challenges.

In the case of a car fire, the size and limited accessibility of the battery can result in prolonged burning. Preventing the spread of the fire to neighboring vehicles, properties, and buildings may require a substantial amount of water. Incidents can occur in public locations such as multi-storey car parks, passenger ferries, tunnels, and charging stations, which are often found in supermarkets, car repair and maintenance facilities, or even within the owner's garage. These fires can pose significant threats to life, safety, and property.

LITHIUM-ION BATTERY FIRE BLANKET

The Lithium-ion battery Fire blanket range is crafted using advanced fire-resistant technical fabrics that are specifically designed to withstand high temperatures. These fabrics are based on silica glass fiber, known for its exceptional heat resistance.

To enhance their protective properties, the fibers are treated with flame deflection protection and abrasion-resistant coatings, ensuring durability and longevity. The base material, a non-flammable vermiculite dispersion mineral-coated glass fabric, is further reinforced with a sacrificial silicone layer for added protection.

These specialized battery Lithium-ion battery Fire blankets are tailored specifically for lithium-ion battery fires, and we offer a range of sizes, including blankets large enough to cover an entire electric vehicle (EV). The Lithium-ion battery Fire blanket is a highly effective tool for swiftly bringing battery fires under control. Once positioned over a burning battery, such as in an EV, it is designed to provide the following benefits:

1. Preventing fire propagation: The blanket effectively blocks the spread of fire, minimizing the risk of the fire spreading to other areas.
2. Containing smoke and toxic fumes: By confining the fire, the blanket helps limit the release and spread of harmful smoke and toxic fumes, creating a safer environment.
3. Facilitating safe evacuation: The Lithium-ion battery Fire blanket enables individuals to evacuate the affected area with reduced risk, providing valuable time for safe escape.



The Lithium-ion battery Fire blankets are engineered to withstand extremely high temperatures over an extended duration. They are also designed to be robust enough to contain hot metallic fragments that may be expelled from the battery module during an incident.

With these technical benefits, our Lithium-ion battery Fire blankets offer a reliable and efficient solution for managing lithium-ion battery fires, ensuring the safety of individuals and minimizing property damage.

TECHNICAL PARAMETER

Item	Specification
Material	Blanket: Silica Fiberglass with both sides silicone coated Thread: Kevlar with stainless steel strengthen Edge strip: Fire resistant polyester Strap: Kevlar
Weight	approx 890g/m ²
Thickness	approx. 0.85mm
Working temperature	Max 1200°C (Higher than lithium battery combustion temperature (700-900°C))
Size	1.5 x 1.8m, 2.7 x 3 m, or as requirement
Color	Black, Gray, or as requirement

IN CASE OF LITHIUM-ION BATTERY FIRE

1. Ensure everyone evacuates the area immediately.
2. Contact the fire brigade (or equivalent emergency services) without delay, even if the fire seems minor. Small fires can rapidly escalate.
3. Be aware that batteries have the potential to reignite, even after appearing extinguished. Exercise caution and monitor the situation.
4. The user should assess the suitability of the Lithium-ion battery Fire blanket for the specific fire at hand. Each fire situation is unique, and proper judgment is necessary.
5. Large fires should be handled by trained professionals. Do not attempt to combat significant fires without the appropriate expertise and equipment.
6. If there is any uncertainty or doubt about the situation, be prepared to leave the area promptly. Do not attempt to smother a large fire with the blanket as it may not be effective.

It is crucial to prioritize personal safety and rely on trained professionals to handle complex or hazardous fire situations.



HOW TO USE THE FIRE BLANKET

Note: Only use the blanket if you feel confident and have received the necessary training to handle fire incidents.

To ensure safe and effective use of the Lithium-ion battery Fire blanket, please follow these guidelines:

1. Unfolding the Blanket:
 - Fully unfold the Lithium-ion battery Fire blanket, ensuring it is ready for immediate use.
2. Cover the Burning Material
 - Using the pull loops provided, approach the fire cautiously.
 - Carefully place the Blanket over the fire, ensuring it covers the entire area of the battery pack or the device containing it.
 - Shield yourself from the flames as you approach the fire, paying special attention to protecting your hands during placement.
3. Minimizing Oxygen Intake:
 - Try to minimize the number and size of folds in the Blanket to reduce the oxygen supply under it, which helps to smother the fire effectively.
4. Deployment Assistance:
 - For larger Blankets, it may require two or more people to deploy it safely.
 - It is recommended that one person on each side of the Blanket holds the pull loops and simultaneously drags the blanket over the fire, ensuring it evenly covers the flames or device.
5. Toxic Fumes:
 - Be aware that toxic fumes can be emitted by lithium-ion batteries, even when they are not actively burning. Take necessary precautions and avoid inhaling these fumes.
6. Moving Away:
 - Once the Blanket has been applied, move well away from the area to a safe location.
7. Calling Emergency Services:
 - For larger fires, including EV fires, always call the fire brigade, emergency services, or local authorities to report the incident and seek professional assistance.
 - They can determine when the fire incident has ended and provide guidance on safely removing the Blanket.
8. Safe Removal and Disposal:
 - Contact the relevant authorities for proper removal and disposal of the affected device, following their instructions and guidelines.

Using the Lithium-ion battery Fire blanket should be done with caution and appropriate training. Prioritize personal safety, and always seek professional assistance for larger or hazardous fire incidents.



STORAGE AND MAINTENANCE

To ensure the readiness and effectiveness of the Lithium-ion battery Fire blanket, please follow these guidelines for storage and maintenance:

1. Storage:
 - Store the Blanket in an easily accessible location, preferably in proximity to any known fire risks.
 - For smaller blankets, consider wall mounting them at eye level for quick and easy access.
 - Ensure that the Blanket can be rapidly deployed at the first sign of a fire.
2. Yearly Inspection:
 - Conduct a yearly inspection of the Blanket to check for any signs of damage or obstructions that may impede its functionality.
 - Look for tears, fraying, or any other visible damage to the fabric or protective coatings.
 - Ensure that there are no objects blocking or obstructing the Blanket, which could hinder its immediate deployment.
 - Keep the user guide alongside the Blanket for easy reference.

Regular maintenance and inspection are essential to ensure that the Lithium-ion battery Fire blanket remains in optimal condition and is readily available for use in case of a fire emergency.