



## DESIGNED TO CONTAIN ELECTRIC VEHICLE FIRES

The Fire Cloak Car Fire Blanket has been developed to contain electric, hybrid, petrol and diesel vehicle fires.

The most common form of fire in electric or hybrid vehicles is when the high energy battery is damaged, or a manufacturing fault results in a short circuit. The battery can then go into 'Thermal Runaway', this is a phenomenon where damaged cells heat up rapidly to such an extent that a fire starts. The fire then compromises adjoining cells and a "domino effect" occurs spreading to the whole battery array.

Thermal Runaway fires cannot be extinguished by conventional means!

The electrolyte in a Lithium-Ion battery contains flammable hydrocarbons, added to which Lithium is self-oxidising which fuels the fire. If left unchecked extremely high temperatures can result.

Utilising the Fire Cloak Car Fire Blanket minimises the combustion potential by depriving the fire of Oxygen. This inhibits the fire and consequently temperatures drop rapidly, reducing potential damage to surrounding vehicles and property.

The Fire Cloak Car Fire Blanket can be deployed easily by two people and is supplied in a convenient storage holdall for protection and ease of transport. Wall mount and mobile storage cabinets are also available.

## OUR PRODUCTS:

### FIRE CLOAK™ EV CAR FIRE BLANKET

Product Code: **EVCFB2186**  
 Size: **8 x 6 meters**  
 Weight: **c.24kg**  
 Suitable for most cars and small vans

### FIRE CLOAK XL™ EV CAR FIRE BLANKET

Product Code: **EVCFB1209**  
 Size: **12 x 9 meters**  
 Weight: **c.35kg**  
 Suitable for Large Cars, 4x4s, SUVs, Pick-Up Trucks and Panel Vans

### FIRE CLOAK™ LITHIUM BATTERY BLANKET

Product Code: **EVLBB6143**  
 Size: **4 x 3 meters**  
 Weight: **c.11kg**  
 Suitable for most cars and small vans

## STORAGE SOLUTIONS:



### WALL MOUNTED STORAGE BOX

Product Code: **EVFBC2295**

### MOBILE STORAGE BOX

Product Code: **EVSBW2290**



## TECHNICAL DATA

FIRE CLOAK<sup>™</sup> EV CAR FIRE BLANKET EVCFB2186

### PHYSICAL DATA:

**Material Description:** Silica quarts fabric blend with fireproof silicone coating to both sides. Reinforced corners with heavy duty silicone fabric pull handles. All seams and handles stitched with high temperature resistant thread.

**Size:** 8x6 meters (48m<sup>2</sup>) **Weight:** c.24kg **Application:** Electric, Hybrid, Petrol & Diesel fuelled vehicles.

### TECHNICAL DATA:

Property	Description	Value	Tolerance	Test Standard
Fabric Weight	-	520gsm	±10%	EN 12127
Tensile Strength (Typical)	Warp Weft	4800 N/5cm 3700 N/5cm	±5% ±5%	ISO 4606
Electrical Burner Test	-	M0	0	EN 13501
Fabric Melting Point	-	>800°C	-	
Material Fire Test	-	Class 0	-	BS476, Part 6+7
Reaction to Fire*	-	B-s1, d0	-	EN 13501-1:2007 + A1:2009
Heat Resistance**	Intertek Test	Over 800°C	-	Non-Available
Hydrocarbon Resistance	-	Rating # 7	-	BS EN ISO 14419:2010
Hydrostatic Pressure Test	Waterproof	492cm/H <sup>2</sup> O (Mbar)	-	BS EN 20811: 1992 / ISO 811

\***Reaction to Fire:** Based on information assimilated from the fabric manufacturers technical database, definitive ISO testing is currently in progress (as at 03/04/2023).

\*\***Heat Resistance Testing:** Samples were submitted to Intertek<sup>®</sup> and furnace testing to 800°C was conducted. The material, whilst compromised, retained its structure and was deemed effective for the intended purpose.

**Note:** Whilst EV first can reach core temperatures exceeding 1,300°C, the surface temperature of the vehicle body will be much lower than this. Once deployed, the Fire Cloak Car Fire Blanket reduces temperature rapidly by depriving the fire of Oxygen. This allows the Fire Cloak Car Fire Blanket to perform effectively with its fire resistance ratings.

**Live testing at Horiba MIRA (Motor Industry Research Association, Nuneaton, UK):** The Fire Cloak EV Car Fire Blanket was deployed over a burning Nissan Leaf that was in an advanced state of Thermal Runaway. The fire temperature dropped rapidly from over 900°C to 47°C in under 10 minutes.