

Product Highlights

- Flame Protection of +1000°C (+1832°F) x 10minutes
- Efficient level of thermal insulation (+500°C / +932°F)
- Thin, flexible and easy to install
- Customized designs for custom fit
- Directly adheres to battery case

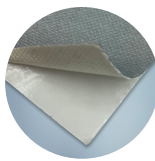
Typical Applications

- Limit propagation of thermal runaway
- EV Battery Case Liner
- EV Battery Pack:
 - Module level protection
 - Component level protection

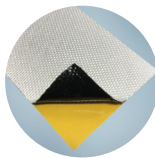
Protexx-Shield® 7000 / 7005 / 7010 is a thin, flexible thermal and flame barrier specifically designed as anti-propagation protection within EV battery pack. Product is an engineered composite structure that provides functionality as a flame barrier and provides thermal insulation and electrical insulation. Protexx-Shield 7005 and 7010 is available with high temperature, pressure sensitive adhesive to allow for direct application onto a variety of surfaces.



Protexx-Shield 7000 is constructed of multiple layers of materials including a flame barrier layer with a specialty coating and a silica fabric structure for strength and insulation properties to limit propagation and failures due to thermal runaway event. This version requires mechanical attachment and has the highest level of flexibility.



Protexx-Shield 7005 takes the base of Protexx-Shield 7000 and applies a pressure sensitive adhesive for direct mounting functionality. This adhesive is designed to be compatible with metal surfaces.



Protexx-Shield 7010 takes the base of Protexx-Shield 7000 and applies a specialty pressure sensitive adhesive for direct mounting functionality. This premium performance adhesive can be recommended based on final application requirements.



Our manufacturing sites are certified ISO 9001, IATF 16949, or AS/EN 9100, ISO 14001 and ISO 45001 (Selected Sites)

Performance Data – Protexx-Shield® 7000 / 7005 / 7010

Property	Test Method	Result		
		7000	7005	7010
Thermal Runaway	SP Internal Test Method	Resists 10min x +1000°C (+1832°F) Flame		
Thermal Insulation during +1000°C (+1832°F) x 10min flame	SP Internal Test Method	+500°C (+932°F) thermal insulation when mounted on steel plate		
Dielectric Strength Initial	IEC 60243-1	>5kV/mm		
Electrical Insulation: Initial & Post Thermal Runaway	1000V DC applied	>4000 MΩ		
Thickness	ASTM D1777	0.65mm	0.78mm without release liner	0.70mm without release liner
Density	ASTM D1777; D3776; D3776M	1.95 g/cm3 tested without adhesive		

All numeric performance data shows average or typical values. Please consult your sales representative for product drawings, test reports and OEM approvals.

Construction & Typical Product Characteristics

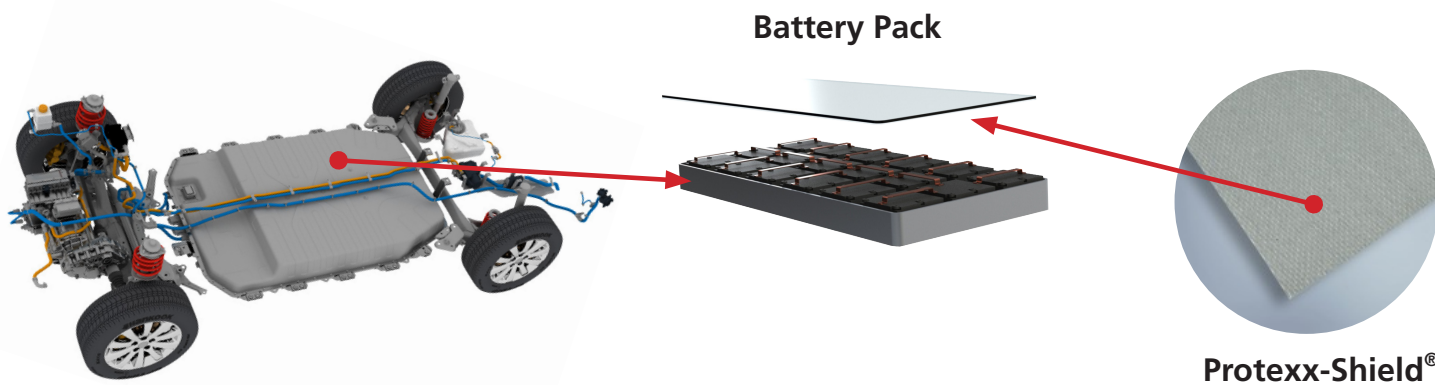
Silica fabric with specialty coating available with various high temperature pressure sensitive adhesive backing

Availability

This product is designed to customer specific application, geometry and performance requirements.

Due to the nature of this custom product, please consult your local sales representative for more details.

Protection of Battery Pack



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 EMEA: (33) 3 44 39 06 06 • Japan: (81) 45 330 0300 • China: (86) 21 6182 7560
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