

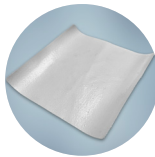
Product Highlights

- Flame Protection of
 - +1500°C (+2732°F) x 10 minutes
 - +1000°C (+1832°F) x 30 minutes
- Good level of thermal insulation (+600°C / +1112°F)
- Thin, flexible and easy to install; compatible with automated assembly
- 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® 7020 / 7025 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 7020 and 7025 is available with high temperature, pressure sensitive adhesive to allow for direct application onto a variety of surfaces.



Protexx-Shield 7020 is constructed of multiple layers of materials including a flame barrier layer with a specialty higher performance 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 or adhesive applied during the installation process and has the highest level of flexibility.



Protexx-Shield 7025 takes the base of Protexx-Shield 7020 and applies a pressure sensitive adhesive for direct mounting functionality. This adhesive is designed to be compatible with metal surfaces and is compatible with automated assembly.



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

Performance Data – Protexx-Shield® 7020 / 7025

Property	Test Method	Result	
		7020	7025
Thermal Runaway	SP Internal Test Method	Resists 10min x +1500°C (+2732°F) Flame Resists 30min x +1000°C (+1832°F) Flame	
Thermal Insulation during +1000°C (+1832°F) x 10min flame	SP Internal Test Method	+600°C (+1112°F) thermal insulation when mounted on steel plate	
Dielectric Strength Initial	IEC 60243-1	>4.0kV DC x 1min Hold	
Electrical Insulation: Initial & Post Thermal Runaway	1000V DC applied	>4000 MΩ	
Thickness	ASTM D1777	0.7mm	0.8mm without release liner
Flammability	UL 94	V0 Rating	
Thermal Conductivity	ASTM D1530	0.21 [W/m*K]	
Density	ASTM D1777; D3776	0.98 g/cm ³ tested without adhesive	
Specific Heat	ASTM E1269	1.27 [J/g*K]	

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

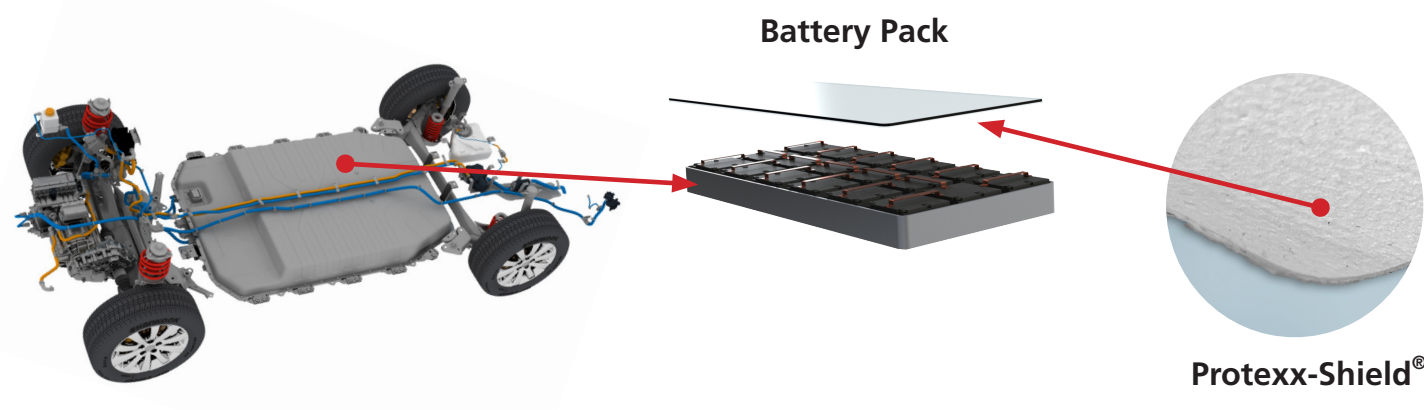
Silica fabric with specialty higher performance coating available with various high temperature pressure sensitive adhesive backing

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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