



ALPHA

engineered composites

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ZeroAdvance™ Thermal Runaway Protection Series: ZA070-S UltraLight Heat Shield

ZA070-S represents a series of next-generation heat shields, expertly designed for a wide range of battery applications. This composite construction balances effective thermal and electrical insulation properties with an ultra-lightweight, low profile design engineered for areas where space is limited.

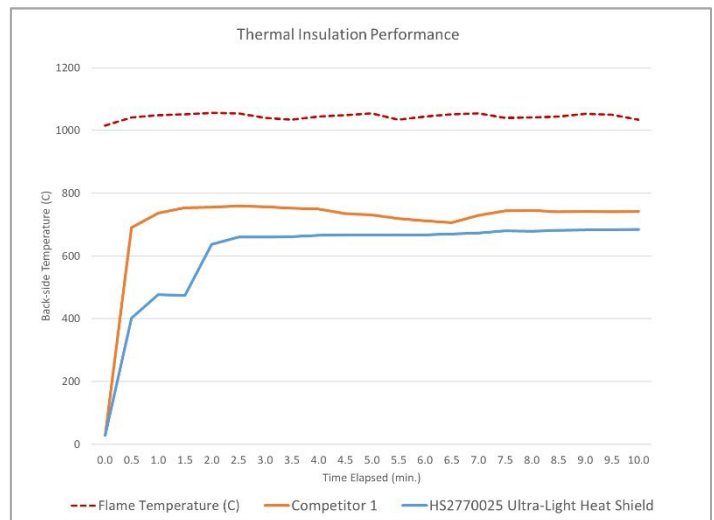
In the case of a thermal runaway event caused by severe cell malfunction, ZeroAdvance™ Series heat shields are designed to contain and effectively delay flame propagation to other vehicle compartments.

KEY FEATURES

- Ultra-thin, highly flame resistant thermal insulation barrier
- Electrically insulating
- Flexible design, easily cut to shape
- Resistant to abrasion and wear
- UL94 V-0 adhesive-backed version available

APPLICATIONS

- Module-Module Insulation and Fire Protection
- Cell-to-Cell Thermal Barrier



PRODUCT SPECIFICATIONS

		ZA070-S	Test Method
Weight		780 g/m ²	ASTM D-3776
Thickness		0.75 mm	ASTM D-1777
Tensile Strength		54 kg/cm	ASTM D-5034
Puncture Resistance		357 cm-kgf	ASTM D-751
Flame Resistance	>10 minutes	1000°C	AEC Internal
Thermal Insulation	ΔT after 10 minutes at 1000°C	410°C	AEC Internal
Dielectric Breakdown Strength		65 V/mil	ASTM D-149
Breakdown Voltage	standard operation	>2 kV	ASTM D-149
Breakdown Voltage	after thermal runaway event	>2 kV	ASTM D-149
Thermal Conductivity		0.622 W/m-K	ASTM E-1530

REV: 6/10/2024

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