

# **SafeCASE**

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#### PRODUCT DESCRIPTION

KULR's patent pending SafeCASE is a DOT permitted Passive Propagation Resistant (PPR) storage and transportation system for batteries. It is designed to mitigate thermal runaway, providing safe and sustainable storage and transportation for lithium-ion cells and battery packs that are up to 2.1kWh per case and utilizes KULR's patented Thermal Runaway Shield (TRS) technology. It is available in multiple sizes and can be customized upon request.

## **FEATURES AND BENEFITS**

- DOT approved for ground transportation
- Rated up to 2.1kWh per case
- Reusable
- Foldable for compact storage
- Sustainable
- Safe nontoxic construction

#### **TYPICAL APPLICATIONS**

SafeCASE can be customized to fit any application within the rated energy limit but is typically used for lithium-ion cell/battery storage, transportation, and DDR/hazardous li-ion battery recovery and recycling.

#### **TYPICAL PROPERTIES**

PROPERTY	TYPICAL VALUE	TEST METHOD							
External Case									
Construction	Fiberglass/Silicone	N/A							
Color	Black	Visual							
Maximum Operating Temperature	1093°C	Material Prop							
TRS									
Construction	<b>Encapsulated Coolant</b>	N/A							
Maximum Energy Rating	Up to 2.1KWh (Standard Size)	DOT Approved TR Test <sup>2</sup>							
<sup>1</sup> Thickness	0.005in	Micrometer							
<sup>1</sup> Tensile Strength (at break)	>14 lbs	ASTM D882							
<sup>1</sup> Tear Strength (375F;26psi; 1 sec)	osi; 1 sec) >1.7lbs ASTM689								
Seal Strength (375F;26psi; 1 sec)	Seal Strength (375F;26psi; 1 sec) 12 lbs/in ASTM								
<sup>1</sup> Puncture Strength >25 lbs		TMS 101-C, Method A							

 $^1$ For further information see TRS Technical Data Sheet,  $^2$ DOT test performed by KULR to receive permits #21139,21167,21193



PROPERTY	TYPICAL VALUE	TEST METHOD						
Ablative Reinforcement								
Construction	Composite	N/A						
Density	$1.3-1.5 \text{ g/cm}^3$	ATM D792						
Tensile Strength	>80MPa	ASTM D638						
Compression Strength	>180MPa	ASTM D695						
Flexural Strength	>80MPa	ASTM D790						

PRODUCT	DIMENSIONS	RATING	INTERNAL DIMENSIONS	EMPTY WEIGHT	MAXIMUM WEIGHT	ABLATIVE REINFORCMENT
Standard	18"W x12"D x 8"H	2.1 kWh	17.5"W x11.5"D x7.5"H	8.69lbs	66lbs	Yes

#### **AVAILABILITY**

SafeCASE can be engineered in custom sizes. Please contact KULR Technology Group for additional information.

### **DISCLAIMER**

Data on this Technical Data Sheet (TDS) are typical values and for reference only. The information provided in this TDS, including but not limited to the recommendations for use and application of the product, are based on our knowledge and experience of the product. The product can have a variety of different applications, as well as differing working conditions and environments that are beyond our control. Factors or events that could cause actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We cannot guarantee future results, performance or achievements. Furthermore, no representations or warranties are made as to the accuracy or reasonableness of any assumptions on which the data or information is based.

This product is not intended for use with any products containing lithium metal. KULR Technology Group, Inc. is, therefore, not responsible or liable for the suitability of our products for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you conduct your own prior trials to confirm such suitability of our product for your use and application and within you working conditions and environments.