

# AS17-s

## Thermal Insulation Felt

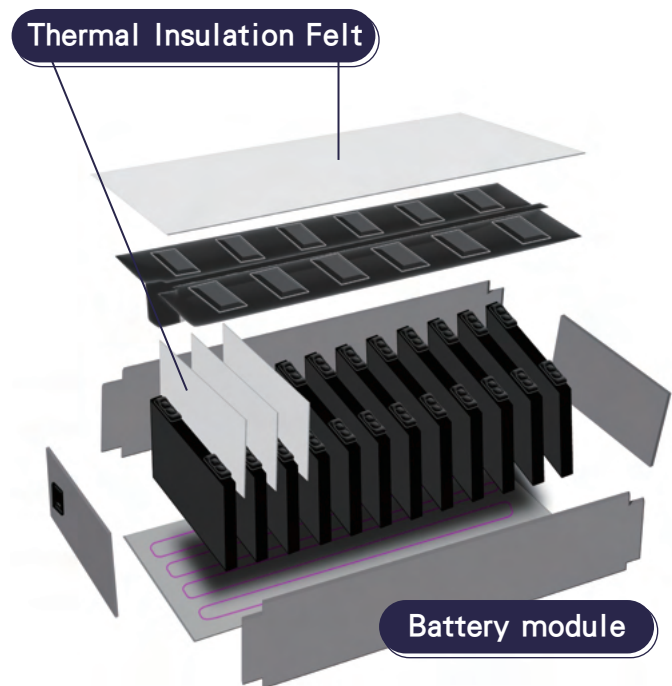
LiPOLY AS17-s thermal insulation material is a fiber composed of porous structure silica, aluminum oxide and other materials, featuring an extremely low thermal conductivity of 0.028 W/m\*K. AS17-s is known for its ability to prevent thermal runaway, with a low density and the capability to withstand temperatures up to 1300°C. Its outstanding characteristics include excellent thermal insulation, superior noise reduction, insulation, cushioning, and fire resistance, making it renowned in various applications. AS17-s is utilized across many different fields, including aerospace, energy storage, military, new energy, automotive, firefighting, and rail transportation. Application scope of AS17-s Continuously expanding, as the technology further develops, we will see more applications in emerging fields in the future, and these applications will continue to drive the importance of its application in modern industry and life.

### ■ FEATURES

- / Excellent thermal insulation performance, with a thermal conductivity of 0.028 W/m\*K
- / Exceptional thermal stability, suitable for long-term use in environments up to 1300°C
- / Good aging resistance
- / High friction coefficient and stability, providing long-term physical support for various substrates
- / Complies with RoHS and REACH standards
- / Available in both rolls and sheets
- / Cotton felt feeling on surface

### ■ TYPICAL APPLICATION

- / Industrial applications, such as industrial industry, EV related (battery modules, electromagnetic cabin fireproof and thermal insulation layer, engine compartment fireproof and thermal insulation layer, body flame retardant and thermal insulation layer, seat flame retardant lining dashboard fireproof and thermal insulation layer)



### ■ TYPICAL PROPERTIES

PROPERTY	AS17-s	TEST METHOD	UNIT
Color	White	Visual	-
Thickness	Customized	ASTM D374	mm
Density	3.0	ASTM D792	g/cm <sup>3</sup>
Water absorption	0	ASTM D570	%
Application temperature	-60~1300	-	°C
Short time temp.@30sec	1650	-	°C
TML(wt%)	0.02	By LiPOLY	-
Outgassing CVCM (wt%)	0.04	By LiPOLY	-
ROHS & REACH	Compliant	-	-
<b>THERMAL@3.0mm</b>			
Thermal conductivity	0.028	ASTM D5470	W/m*K
Thermal impedance@10 psi	56	ASTM D5470	°C-in <sup>2</sup> / W

Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be constructed as a guaranty of patent infringement. Copyright LiPOLY.