

# AS28-s

## Thermal Insulation Foam

LiPOLY AS28-s is an ultra-soft thermal insulation material with a remarkably low thermal conductivity of just 0.028 W/m\*K. In addition to its outstanding insulation performance, it also offers waterproof properties, high resilience, low compression set, excellent mechanical fatigue resistance, and flame retardancy ensuring stable and reliable performance even under harsh conditions. Despite its extremely lightweight structure, AS28-s effectively combines multiple functions such as thermal insulation, soundproofing, electrical insulation, shock absorption, and fire resistance, making it a multifunctional, high-performance material. With the increasing demand for materials capable of withstanding extreme environments in high-tech industries, AS28-s has been widely adopted in aerospace, energy technology, electronic devices, transportation, consumer electronics, and home appliances.

### ■ FEATURES

- / Thermal conductivity: 0.028 W/m\*K
- / Lightweight with a specific gravity of 0.2 g/cm<sup>3</sup>
- / Extremely soft, with a hardness of Shore 00/15
- / Customizable die-cutting available in both roll and sheet forms
- / Stable performance with excellent weather resistance
- / Complies with RoHS and REACH compliant
- / Excellent compression deformation resistance and long lasting high elasticity, making it suitable as long term shock protection accessories
- / Designed for use in cleanroom environments

### ■ TYPICAL APPLICATION

- / Industrial Applications include automotive electronics, mobile communication devices, drones and aircraft, sports and leisure electronic products, portable devices, computers and tablets, wearable devices, portable gaming consoles, VR equipment, and more.



### ■ TYPICAL PROPERTIES

PROPERTY	AS28-s	TEST METHOD	UNIT
Color	Black / Gray	Visual	-
Thickness	Customized	ASTM D374	mm
Density	0.2	ASTM D792	g/cm <sup>3</sup>
Hardness	15	ASTM D2240	Shore OO
Water absorption	0.01	ASTM D570	%
Application temperature	-60~200	-	°C
Tensile Strength	>120	ASTM D412	Kpa
Elongation at Break	>70	ASTM D412	%
Compressive Stress@25%	≥10	By LiPOLY	Kpa
ROHS & REACH	Compliant	-	-
<b>ELECTRICAL</b>			
Dielectric Breakdown	3.1	ASTM D149	KV/mm
Volume resistivity	>10 <sup>13</sup>	ASTM D257	Ohm·mm
<b>THERMAL</b>			
Thermal conductivity	0.028	ASTM D5470	W/m*K

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