

# THERMAL BARRIER DEVELOPMENTS

## THERMAL BARRIER SOLUTIONS AND PRODUCT FEATURES

### IMPREGNATED ZOLTEK OX FELT WITH SILICA AEROGEL - FOR BATTERY INSULATION

- Low thermal conductivity
- High melting point
- Highly porous material
- Sound absorption
- Good flame resistance
- Heat resistance
- Good flexibility
- High strength and tear resistance
- Reduce battery module weight
- Customizable by encapsulation
- Water repellent
- Good compressibility

By combining Zoltek OX felt and the silica aerogel, it is possible to make an ideal thermal barrier material used for battery insulation systems.

The manufacturing process utilizes state-of-the-art supercritical drying technology.

The composite is prepared by impregnating an aerogel sol into Zoltek OX felt, followed by solvent replacement and supercritical drying.

### CUSTOMIZED STRUCTURE FORM AND APPLICATION

#### ZOLTEK OX AEROGEL

		
<b>OX STAPLE</b>	<b>OX FELT</b>	<b>AEROGEL</b>

#### ZOLTEK OX AEROGEL COMPOSITES AS THERMAL BARRIERS IN EV BATTERIES

		
<b>OX AEROGEL COMPOSITE</b>	<b>ENCAPSULATED OX AEROGEL COMPOSITE</b>	<b>THERMAL PROTECTION IN LITHIUM-ION BATTERIES</b>