



# EST™ Compression Paper

## Product Data Sheet

### Product Description

The EST Compression Paper product family has been developed to accommodate the cyclical expansion pouch cells experience during normal operation. These papers takes advantage of our low bio-persistent Superwool® fibers, combined with a unique binder system and fillers to control the overall compression forces within targeted ranges.

This material is designed to go between pouch cells to delay propagation in case of a thermal event .

### Benefits

- Meets UL94 V-0 requirements
- High dielectric strength
- Excellent finished surfaces
- Lightweight

### Applications

- Lithium Ion pouch cell-cell protection

### Environmental & Health Safety

Superwool low bio-persistent fibres are exonerated and are not classified as carcinogenic by IARC or under any national regulations on a global basis. They have no requirements for warning labels under GHS (Globally Harmonised System for the classification and labelling of chemicals).

In Europe, Superwool fibres meet the requirements specified under NOTA Q of European Directive 67/548. All Morgan Advanced Materials Superwool low bio-persistent fibre products are therefore exempt from the classification and labelling regulation in Europe.

# EST™ Compression Paper

## Product Data Sheet



EST Compression Paper	
Colour	White
Classification Temperature, °C (°F)	1100 to 1300 (2012 to 2372)
Density, kg/m <sup>3</sup> (pcf)	240—305 (15—19)
Dielectric Strength, volts/mil	140
Tensile Strength, kPa (psi)	<205 (<29.7)
Thickness, mm (in)	0.8—6 (0.03—0.24)
Chemical Analysis, % weight basis after firing	
Alumina, Al <sub>2</sub> O <sub>3</sub>	12—20
Silica, SiO <sub>2</sub>	50—60
Calcium Oxide + Magnesium Oxide, CaO + MgO	27—34
Others	<3
Thermal Conductivity, W/m·K (BTU·in/hr·ft <sup>2</sup> ·°F), ASTM C 201, Descending	
200°C (392°F)	0.06 (0.42)
400°C (752°F)	0.08 (0.55)
600°C (1112°F)	0.11 (0.76)
800°C (1472°F)	0.15 (1.04)
1000°C (1832°F)	0.20 (1.39)

Whilst the values and application information in this datasheet are typical, they are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials – Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials - Thermal Ceramics.