

ULTRA-LOW Dk 1.3-1.5

3

POLYIMIDE NANOFIBRE NON-WOVEN FABRICS



Cost-effective and sustainable technology

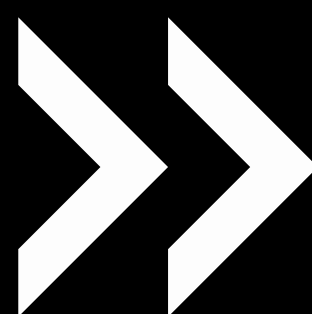
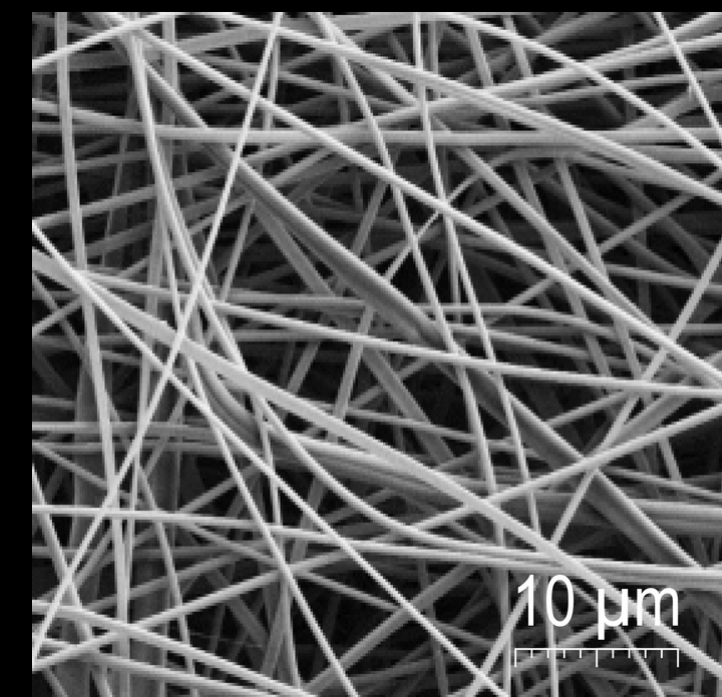
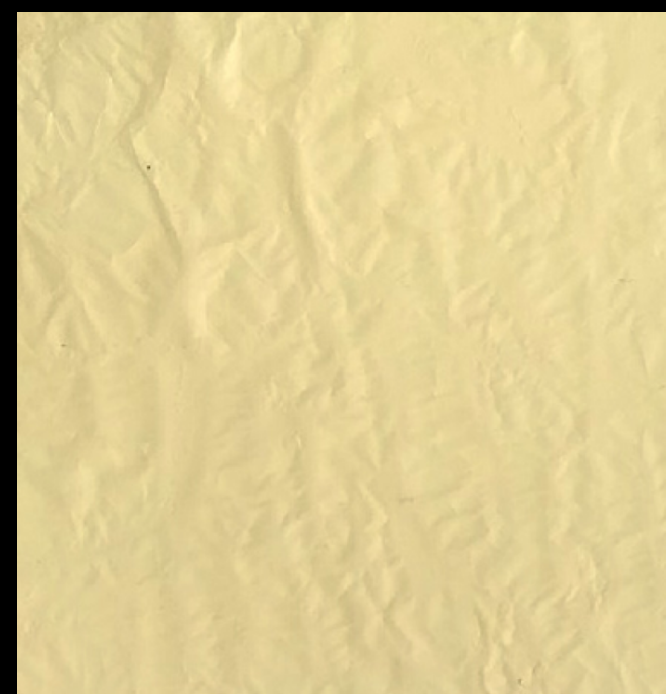
(doesn't require toxic solvents and high curing temperatures, and uses fast curing rates)



Sustain high operating temperatures



Chemical and radiation resistant









FOR NEXT-GENERATION ELECTRONICS, COMPUTING AND TELECOM DEVICES

AS LITHIUM-ION BATTERY SEPARATORS

FOR LI-ION BATTERY HOUSING FOR HIGH-TEMPERATURE PROTECTION AND THERMAL RUNAWAY MITIGATION

AS FILTER MEMBRANES FOR OIL&GAS INDUSTRY

Advantages of our PI non-woven fabric for Li-ion battery separators

-  **Superior thermal stability**
-  **Superior electrolyte uptake and ionic conductivity**
-  **Superior ionic conductivity**
-  **Lower discharge decay with increasing cycle number and higher discharge capacity**
-  **Fire resistance and extremely low thermal conductivity, making them a much safer option**
-  **Good mechanical strength**

[HTTPS://INCAPTEK.COM](https://incaptek.com)

Future developments

Thermal runaway is a common problem of Li-ion batteries (when the cell enters an uncontrollable, self-heating state, which can result in fire).



Development of safer batteries by preventing thermal runaway of Li-ion batteries.