

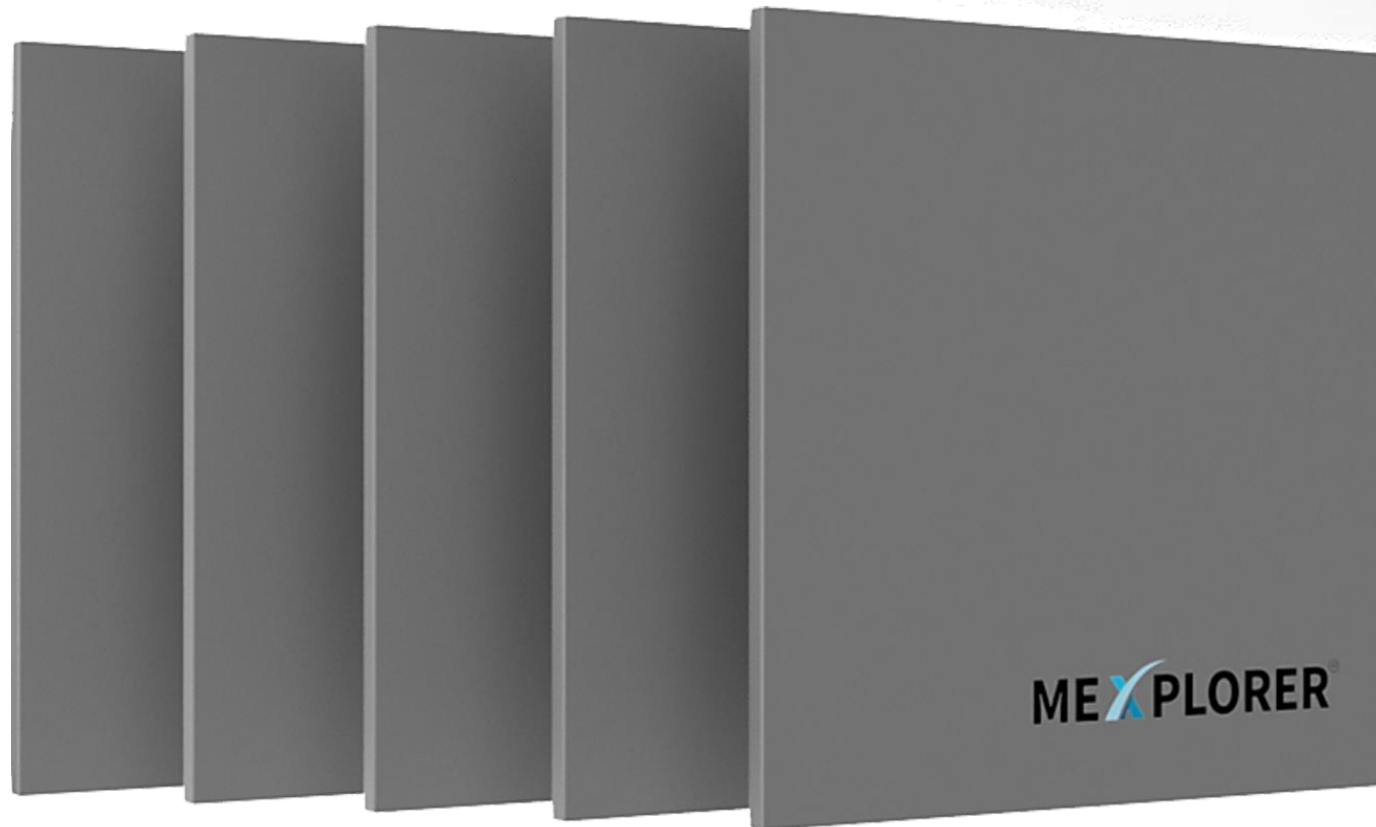
High-Temperature Fire-resistant & Heat-insulating Graphene sheet



Graphene &
Its Applications

MEXPLORER[®]

EV Thermal barrier Graphene sheet

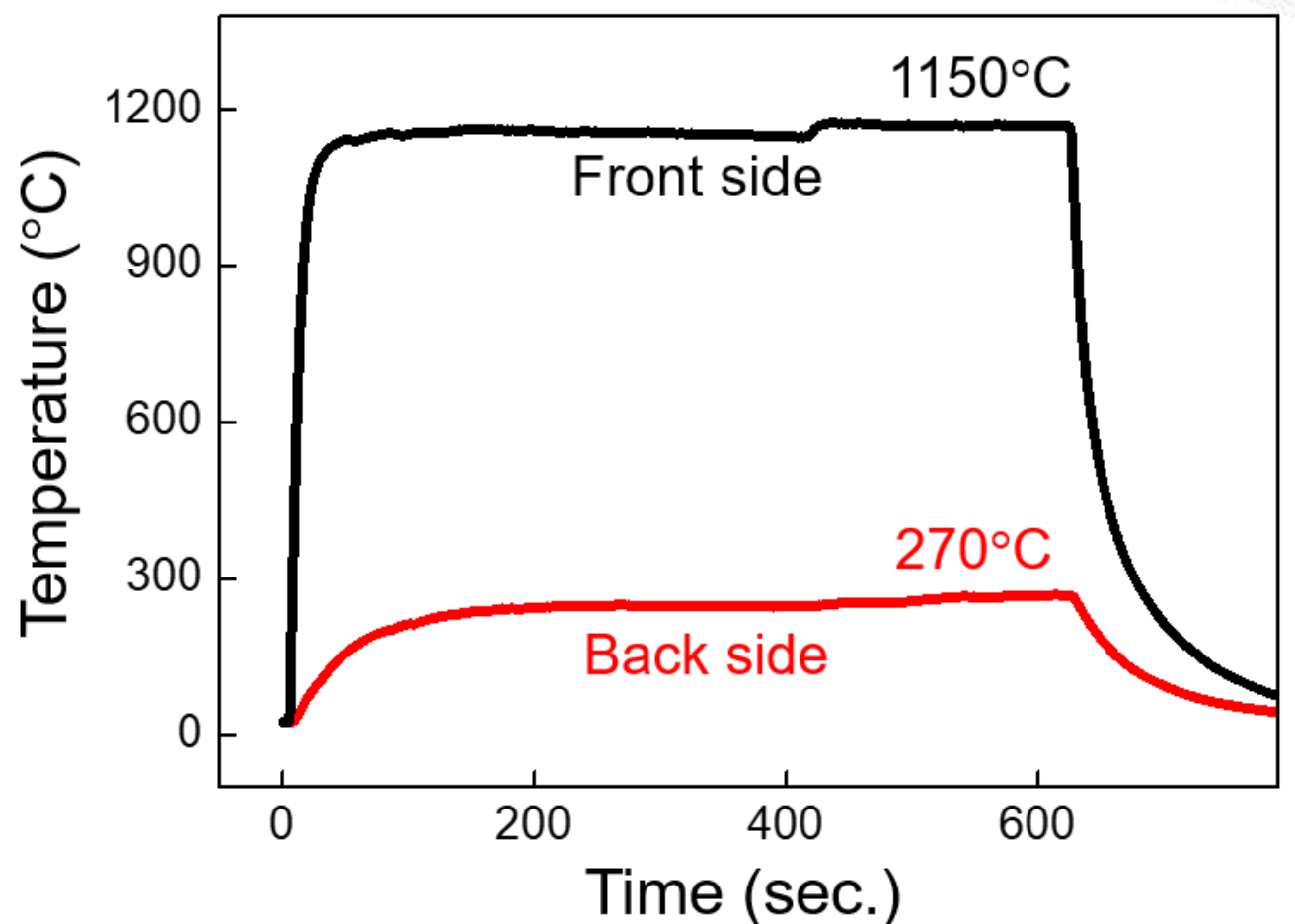
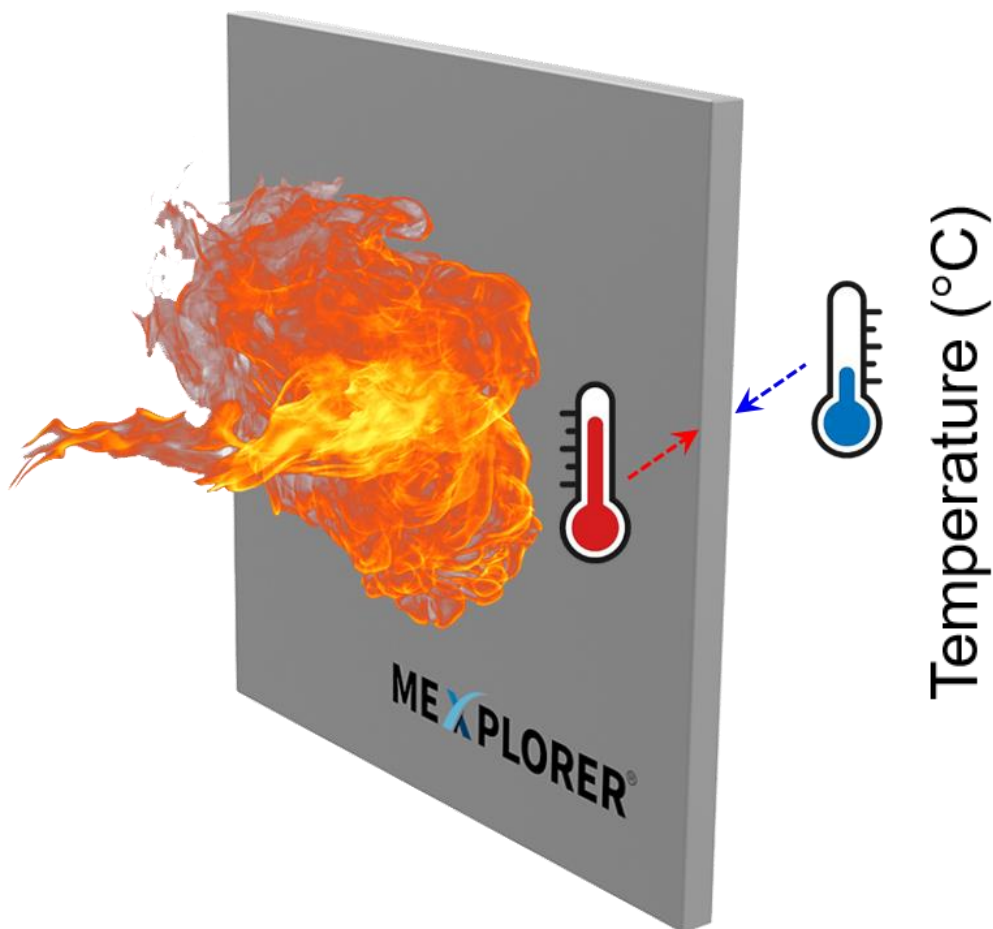


- One-body Fire-resistant & Heat-insulating material at $>1100^{\circ}\text{C}$
- non-melting & non-combustible Fire-resistance at $> 1100^{\circ}\text{C}$
- Excellent Heat-insulation with thermal conductivity of $\sim 0.05 \text{ W/m}\cdot\text{k}$
- Aerogel-grade light weight material with density of $0.22 - 0.24 \text{ g/cm}^3$



EV Thermal barrier Graphene sheet

• Excellent Heat-insulating performance



• Product characteristics

- Excellent Heat-insulating performance with thermal conductivity of $\sim 0.05 \text{ W/m}\cdot\text{k}$ (room temperature)
- Light weight material (density of $0.22 - 0.24 \text{ g/cm}^3$)
- UL94 V0 Flammability rating
- Compliance with the RoHS Directive (six substances)
- Thickness: 2mm, 3mm

• Compressive Resistance

Compressive Resistance
5 kPa @ 10% strain
10 kPa @ 25% strain
16 kPa @ 40% strain
22 kPa @ 50% strain

Graphene Fire-safe Pouch for Supplementary Batteries



- Graphene Fire-safe Pouch for the Fire-safe storage of supplementary batteries
- non-melting & non-combustible Fire-safe Pouch, blocking a Fire-spill & -transfer in a fire situation
- Graphene Fire-safe Pouch can keep the temperature on the outside surfaces of pouch $<200^{\circ}\text{C}$ in a Fire situation
- Inexpensive entry-level product