Technical Overview

Aluminized Kevlar® Aramid Fabric

Heat reflective aluminized Kevlar® aramid fabric designed for high-temperature environments requiring thermal shielding, mechanical durability, and long-term reliability.

Base material	Para-aramid (Kevlar® type)
Surface treatment	Aluminized heat-reflective coating
Construction	Woven aramid fabric
Fabric thickness	Customized upon request
Areal weight	Customized upon request
Standard width	Customized upon request
Flame resistance	Inherent and permanent
Mechanical resistance	High resistance to abrasion, cutting, and vibration

Product purpose

Aluminized Kevlar® aramid fabric is intended for applications where the material must provide both heat reflection and mechanical protection. The aluminized surface reflects radiant and convective heat, while the para-aramid substrate maintains strength and flexibility under demanding conditions.

Thermal performance

The aluminized surface acts as an effective thermal barrier against radiant heat sources, reducing heat transfer to underlying components. The fabric maintains stability under continuous elevated temperatures and short-term high-temperature exposure.

Mechanical performance

Para-aramid fibers provide excellent tensile strength and resistance to abrasion, cutting, and vibration. The fabric remains flexible and drapable, allowing use in dynamic applications involving movement.

Typical applications

• Heat reflective fire blankets and welding protection
• Welding robot and automation equipment covers
• Hose, pipe, and cable protective jackets
• Foundries and metal processing environments
• Personal protective equipment such as gloves and aprons

Handling and fabrication

The fabric can be cut, sewn, or fabricated into protective covers using standard textile processing methods. Proper handling ensures optimal performance and extended service life.

Limitations

Not intended for direct molten metal contact without additional protection. Not designed as a pressure-containing material. Final performance depends on correct selection based on heat intensity and exposure duration.

RFQ information

To support accurate material selection and quotation, please provide application details including operating temperature, exposure type (radiant or convective heat), required dimensions, mechanical exposure, and estimated quantity.

Reference product page

https://www.pkfiresleeve.com/aluminized-kevlar-aramid-fabric_p49.html

Engineering disclaimer: Performance values may vary depending on application conditions and installation methods.