

DUPONT™ KEVLAR® XP™ K520

Technical data sheet

More Protection with Fewer Layers

- DuPont™ Kevlar® XP™ K520 continues the evolution of the well-known XP™ ballistic protection family. The exclusive Kevlar® XP™ construction allows the creation of vest designs that provide NIJ Standard-0101.06IIIA ballistic performance with reduced backface signature.
- The architecture of Kevlar® XP™ K520 consists of 2 layers of fibers in a +45°/-45° orientation that provides the required stopping power to address standard ballistic threats to body armor with fewer layers thereby reducing labor and material costs compared to designs with traditional woven fabrics or unidirectional materials.
- Kevlar® XP™ features a patented technology enabling flexible and lightweight vest constructions that are robust and long lasting even when exposed to extreme conditions. Using one of the most reliable materials in the market, vests constructed with Kevlar® XP™ K520 helps end-users to safely face the threats that they encounter.

Proper use

- Roll of Kevlar® XP™ are intended for conversion into soft body armor packs, suitable for use in ballistic vests.
- It is the responsibility of the vest manufacturer to design suitable end-products and to obtain the relevant certifications before releasing vests to end-users.

Proper handling

- Avoid tearing and crushing the product.
- Do not use bleach or products containing bleach to clean Kevlar® XP™ K520.
- Ensure that the correct handling procedure is followed in accordance with package weight when rolls are being transported.

Proper storage

- Store in dry temperate area avoiding storage conditions exceeding 66°C (150°F) and avoiding direct exposure to sun or UV light.
- Cover the product with black impermeable plastic.



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Property	Nominal value
Roll width, cm	160
Roll length, m	100
Areal density ⁽¹⁾ , g/m ²	525

(1) Conditioned Weight, 20°C / 65 RH (ASTM D1776)

Ballistic performance

- DuPont™ Kevlar® XP™ soft armor packs with a typical areal density of 5.3-5.4 kg/m² made of 9 layers of XP™ K520 partially stitched, a 3mm foam and 1 layer of XP™ K520 were tested following NIJ IIIA.06 recommendations against .44 Mag Speer and resulted in typical backface signature in the range of 40mm.
- This design solution is provided as an illustrative starting point for end-product dimensioning. Final vest designs must always be tested according to specific end-user requirements.

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