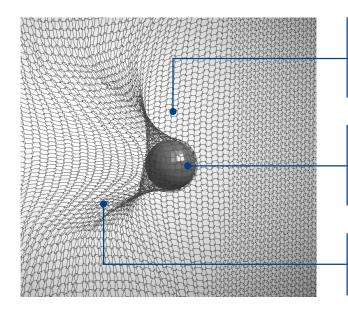
# Frag Knits with Dyneema®



Ultimate protective performance with unmatched comfort

Designed for IED threat profile garments, Frag Knits with Dyneema® are more comfortable, compressible, and ultra light. For protection against micro-mass and meso-mass fragments.



#### Comfort

- Flexibility, elasticity, stretch recovery
- · Light weight, low bulk, compressible
- · Air permeability, moisture transport, soft & cool touch
- Durability & launderability

#### Catching the fragments

- Hinder micro fragments from penetration
- Reduce number of penetrating particles
- Reduce penetration depth
- · Limit back-face deformation

#### **Energy transmission**

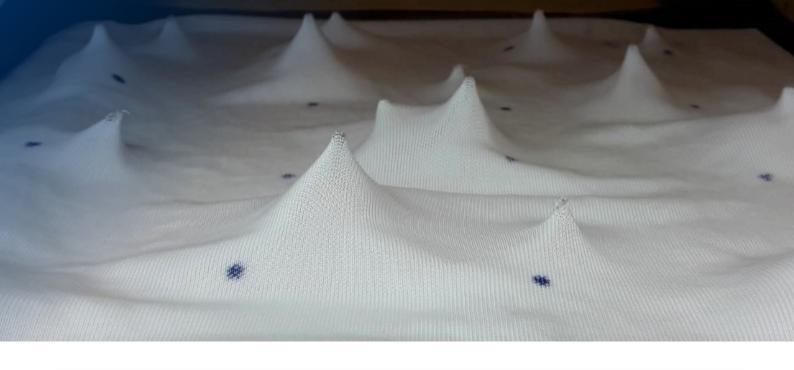
- · Structural elongation, yarn on yarn movement
- · High tear strength, high E-modulus, specific stiffness
- · High transversal breaking strength to the yarn-axis

## Situation ready Frag Knits with Dyneema®

- Penetration-inhibiting textiles for increased personal protection
- Unique benefits to the user include
  - IED-fragment protection
  - Moisture management
  - · Heat-stress management
  - Hygiene management
  - · Exceptional next-to-skin comfort
  - · Full mobility

- Excellent flex-durability, abrasion resistance, tear and bending strength
- Stable against environmental influences
- Use of single layer and hybridization to meet full range of protection needs
- · All fabrics can be laundered





Textile characteristics	Unique benefits to the user
Protection	High fragment protection with single and multiple layer constructions Focus on micro-mass and meso mass fragment protection: < 0.13g – 1.1g (2 – 17 grain)
Light weight	Low burden: Excellent integration into PPE and garment systems as single and multiple layer construction
Mobility management	Body's motion adaption: Elastic, flexible, good stretch retention Low bulk, compressible Smooth motion: good fabric-on-fabric and yarn-on-yarn movement
Thermal management	Air permeable, good ventilation Cool touch based on Dyneema® fiber properties
Moisture management	Hydrophilic: moisture transport, capillary effect Quick drying Hydrophobic: water repellent
Hygiene management	Easy laundering for all grades Odor prevention: inherent Dyneema® fiber properties
Tactile comfort next to skin	Smooth, soft, suppleness  Dyneema® fibers with ECO-Tex II certificate  Excellent fiber and textile bending properties = no skin irritations!  Stable against alkaline/acidic body fluids
Excellent durability	High tensile, tear and breaking strength High abrasion resistance and flex- durability Low yarn and fabric friction Cut/slash resistance Environmental stable performance properties Micro body climate stable performance properties



### www.Dyneema.com

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