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. Select from five flexible knits in four colours, 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

- Five specific grades
 - Three grades with core protection for micro-mass fragments
 - Two grades with core protection for meso-mass fragments
 - Use of single layer and hybridization to meet full range of protection needs
- Available in four colors: white, sepia-tan, sage-green, wolf-grey
- 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 – 17grain)
Light weight	Five textile grades in the range of: 150 – 700 g/m² (4.4 – 20.6 oz/y2) 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

DISCLAIMER

All Information, data, recommendation, etc. relating DSM Dyneema products (the Information) is supported by research. DSM Dyneema assumes no liability arising from (i) the application, processing or use made of the Information or products; (ii) infringement of the intellectual or industrial property rights of third parties by reason of the application, processing or use of the Information or products by the Buyer. Buyer shall (i) assume such liability; and (ii) verify the Information and the products. Dyneema* and Dyneema*, the world's strongest fiber[™] are trademarks of DSM. Use of these trademarks is prohibited unless strictly authorized.