

GORE[®] CHEMPAK

FABRIC

MULTI-THREAT SUIT



MULTI-THREAT

Remain Highly Protected Against ChemBio Hazards During Physically Demanding Missions

- Increased mobility
- Certified to NFPA 1994, Class 2 for outstanding protection in hot zone operations
- Added confidence due to high-performance fabric and garment construction



Top entry design

Enhanced Functionality in Chemical and Biological Environments

Excellent Mobility During Sustained Missions

When responding to an incident with potentially hazardous materials, tactical officers need to be protected but also must be able to move freely. In addition, responders perform physically demanding activities that increase the risk of heat stress. Multi-Threat suits made of lightweight, flexible GORE® CHEMPAK® Ultra Barrier Fabric give the wearer unencumbered movement, increased range of motion, improved peripheral visibility, and excellent dexterity. Wetting the outer layer of this fabric reduces heat stress on the wearer by promoting evaporative cooling, allowing the wearer to remain engaged longer.

Added Confidence

Responders wearing suits made with GORE® CHEMPAK® Ultra Barrier Fabric can be confident that they will remain protected for multiple uses, as demonstrated in a rigorous field trial involving five uses and five launderings¹. The fabric's construction provides excellent durability because its protective barrier is laminated between two layers of flame-resistant textiles, one of which is a high-strength textile that resists cuts, tears, and punctures. Also, the suit is constructed with high-strength sewn and sealed seams, providing another feature that allows the responder to remain focused on the task at hand.

Certified Protection

Suits made of GORE® CHEMPAK® Ultra Barrier Fabric are certified to both NFPA 1994, Class 2 and NFPA 1992. With excellent performance to the vapor ingress (MIST) test, garments made with this fabric are ideal for operations that potentially involve blister agents, nerve agents, toxic industrial chemicals, and bloodborne pathogens — operations such as:

- Search and rescue
- SWAT and high-risk entry
- WMD or terrorist incident
- Technical rescue
- Hazardous material emergency
- Containment and decontamination



Certified Protection in CB Hot Zone Environments

		Requirement	Multi-Threat Typical Results
NFPA 1994, Class 2 Ensemble Overall Function & Integrity	Systemic Physiological Protective Dosage Factor (PPDF _{sys})	≥ 361 PPDF _{sys}	≥ 2100 PPDF _{sys}
	Man in Simulant Test (MIST)		
Material Performance			
Burst Strength		≥ 35 lbf	≥ 310 lbf
Seam Break Strength		≥ 15 lbf/2 in	≥ 190 lbf/2 in
Chemical Permeation	Max Level		
Chemical Warfare Agents			
Mustard (HD)	< 4.0 µg/cm ²	60 min	> 720 min
Soman (GD)	< 1.25 µg/cm ²	60 min	> 720 min
Toxic Industrial Chemicals			
Dimethyl Sulfate (DMS)	< 6 µg/cm ²	60 min	> 480 min
Acrolein	< 6 µg/cm ²	60 min	> 480 min
Ammonia (NH ₃)	< 6 µg/cm ²	60 min	> 480 min
Chlorine (Cl ₂)	< 6 µg/cm ²	60 min	> 480 min
Acrylonitrile	< 6 µg/cm ²	60 min	> 480 min

NOTE: Additional chemical test results are available upon request.

The Gore Advantage

For 30 years, W. L. Gore & Associates has been a pioneer in developing high-performance barrier fabrics for law enforcement, domestic preparedness, firefighting, EMS, technical rescue, and military applications. Contact a Gore sales associate today for assistance in selecting the right barrier product for your specific application.

W. L. Gore & Associates, Inc.

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WARNING: No products, including garments, footwear, and gloves, protect completely, even when new; their protective performance will decline with wear, tear, abrasion, and other damage associated with use. CHEMPAK, GORE and designs are trademarks of W. L. Gore & Associates, Inc.

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¹"Wear Trial Performance Results of GORE® CHEMPAK® Ultra Barrier Fabrics: Multi-Threat Garment Application," 2005.

For a copy of the full wear trial report contact W. L. Gore & Associates.

GORE®

PROTECTIVE FABRICS