

GORE[®] CHEMPAK

FABRIC

MULTI-THREAT SUIT



MULTI-THREAT

Chemical hazard

Remain Highly Protected Against ChemBio Hazards During Physically Demanding Missions

- Increased mobility
- Certified to NFPA 1994, Class 1, 2, 2R and NFPA 1992 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 two field trials; five uses and five launderings, and ten uses and two launderings.¹ 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 1, 2, 2R 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
- Technical rescue
- SWAT and high-risk entry
- Hazardous material emergency
- WMD or terrorist incident
- Containment and decontamination



Certified Protection in CB Hot Zone Environments

	Requirement	Multi-Threat Typical Results
NFPA 1994, Class 1, 2 and 2R Ensemble Overall Function & Integrity Systemic Physiological Protective Dosage Factor (PPDF _{sys}) Man in Simulant Test (MIST)	> 441 PPDF _{sys}	≥ 2100 PPDF _{sys}
Material Performance Burst Strength Seam Break Strength Flame Resistance	> 45 lbf > 15 lbf/1 in <2 sec afterflame, no melt and drip	≥ 310 lbf ≥ 190 lbf/2 in Pass
Chemical Permeation Chemical Warfare Agents Mustard (HD) Soman (GD)	Max Level < 4.0 µg/cm ² 60 min < 1.25 µg/cm ² 60 min	Pass Pass
Toxic Industrial Chemicals Dimethyl Sulfate (DMS), Acrolein, Ammonia (NH ₃), Chlorine (Cl ₂), Acrylonitrile, Sulfuric Acid, Tetrachloroethylene, Toluene, Diethylamine and Ethyl acetate	< 6 µg/cm ² 60 min	Pass

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.

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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