

**MT94™**

**MAXIMUM PROTECTION  
UNCOMPROMISED MOBILITY**



**CBRN™**

[www.lionprotects.com](http://www.lionprotects.com)



## MT94™ CBRN ENSEMBLE

The MT94™ (Multi-Threat) CBRN ensemble offers first responders advanced protection when facing some of the world's worst chemical and biological threats. There are models designed specifically for law enforcement, fire, EOD and military use. It is available in front entry and back entry configurations.

The MT94 combines rugged GORE® CHEMPAK® Ultra Barrier Fabric laminated to a tough Nomex® outer textile to offer lightweight and comfortable multi-wear, multi-threat protection. Providing the highest level of protection in a Class 2 suit, the MT94 helps block out high levels of CBRN agents that may be encountered in the "hot zone". It is certified to meet NFPA 1994, Class 2 and NFPA 1992.

- Provides vapor, liquid and limited FR protection against CBRN agents to law enforcement, fire service, EMS and military.
- Streamlined design combines durability, mobility and comfort.
- Certified to NFPA 1994, Class 2 and NFPA 1992 for hot zone operations.

## FEATURES

- Guards against exposure to hazardous waste, drug labs, biological threats and domestic terrorism agents.
- Durable GORE® CHEMPAK® Ultra Barrier Fabric provides protection above IDLH concentration levels against TICs and CWAs while performing tactical operations.
- Lightweight, streamlined design delivers optimum comfort and natural freedom of movement.
- Rugged construction allows you to perform in the most challenging of circumstances.
- Re-usable for multiple wears and washings, if not exposed or contaminated.
- Certified for use with GORE® G9492 glove system and OnGuard HAZMAX® 87012 boots.

## APPLICATIONS

- Technical rescue
- Contaminated rescue
- Decon
- SWAT
- HAZMAT
- Confined space rescue
- Explosives ordnance disposal

## MT94 SPECIFICATIONS

Certification:	NFPA 1994, Class 2 and NFPA 1992
Zone:	Hot
Garment design:	One-piece, rear-entry
Respiratory system:	Contact LION at CBRN@lionprotects.com for options
Hand protection system:	GORE® G9492 glove system with GORE® CHEMPAK® Ultra Barrier Fabric worn under Nomex® outer glove
Foot protection system:	Integrated bootie with GORE® CHEMPAK® Ultra Barrier Fabric; OnGuard HAZMAX® boot
Barrier technology:	GORE® CHEMPAK® Ultra Barrier Fabric
Storage life:	Up to 10 years
Multi-use:	Yes, if not damaged, exposed or contaminated
Training suit available:	Yes

## CERTIFIED PROTECTION IN CB HOT ZONE ENVIRONMENTS

	Requirement	MT94 Results
<b>NFPA 1994, Class 2 Ensemble Overall Function &amp; Integrity</b> Man in Simulant Test (MIST)	≥ 361 PPDF <sub>sys</sub>	≥ 4932 PPDF <sub>sys</sub>
Systemic Physiological Protective Dosage Factor (PPDF <sub>sys</sub> )		

# LAW ENFORCEMENT – FRONT ENTRY



# FIRE SERVICE – FRONT OR BACK ENTRY



# BARRIER CHEMICAL PERMEATION GUIDE

This information is intended to provide guidance to those with technical ability to evaluate the applicability of this data to the specific hazards for their end-use application. The user has the responsibility to determine the proper protective equipment needed for their actual conditions of use.

All data are based on *ASTM F 739 Standard Test Method for Permeation of Liquids and Gases through Protective Clothing Materials under Conditions of Continuous Contact* (chemical challenge 100% concentration and 0.1 µg/cm<sup>2</sup>/min breakthrough end point) except where modification is footnoted.

Challenge Chemical	Time to Breakthrough (minutes)	Footnote
Acetone	>480	
Acrolein	>480	(1)
Acrylonitrile	>480	(1)
Ammonia	>480	
Benzyl Chloride	>480	
Carbonyl Chloride (CG)	>390	(2,6)
Chlorine	>480	(2)
Chloroform	>480	
Cyanogen Chloride (CK)	>480	(2,6)
Dimethyl Sulfate (DMS)	>480	(3)
Ethyl Ether	>480	
Hexane	>480	
Hydrogen Fluoride, HF (Gas)	>430	
Hydrofluoric Acid (48%)	>480	
Hydrochloric Acid (37%)	>480	
Hydrogen Chloride (Gas)	>480	
Hydrogen Cyanide (HCN)	>480	(2)
Hydrogen Peroxide (50%)	>480	
Hydroiodic Acid (55%)	>480	
Lewisite (L)	>720	(4)
Methanol	>480	
Mustard (HD)	>720	(4)
Nitric Acid (70%)	>480	
Sarin (GB)	>720	(5)
Sodium Hydroxide (50%)	>480	
Soman (GD)	>720	(5)
Sulfuric Acid (98%)	>480	
Thionyl Chloride	>480	
Toluene	>480	
V-Agent (VX)	>720	(5)

Industrial chemicals and chemical warfare agents are tested per method outlined in NFPA 1994 Standard on Protective Ensembles for First Responders to CBRN Terrorism Incidents, Class 2, Edition 2001 or 2007.

- (1) Chemical challenge concentration 350 ppm and 6 µg/cm<sup>2</sup> breakthrough end point.
- (2) Chemical challenge concentration 1000 ppm and 0.1 µg/cm<sup>2</sup>/min breakthrough end point.
- (3) Chemical challenge concentration 10 g/m<sup>2</sup> and 0.1 µg/cm<sup>2</sup>/min breakthrough end point.
- (4) Chemical challenge concentration 10 g/m<sup>2</sup> and 4 µg/cm<sup>2</sup> breakthrough end point.
- (5) Chemical challenge concentration 10 g/m<sup>2</sup> and 1.25 µg/cm<sup>2</sup> breakthrough end point.
- (6) Test stopped due to equipment limitation.

All permeation data presented are believed to be reliable. They are generated using swatches of fabric under controlled laboratory conditions by independent and accredited third-party laboratories.

The data in this guide are subject to revision as additional information and knowledge become available.



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