

# MT94™

## MAXIMUM PROTECTION UNCOMPROMISED MOBILITY

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. The MT94 is available in front entry and rear entry configurations.

### BENEFITS

- Limited Hot Zone protection – certified to NFPA 1994, Class 2 and NFPA 1992 for hot zone operations
- GORE® CHEMPAK® Ultra Barrier Fabric provides durable protection against TICs and CWAs above Immediately Dangerous to Life and Health (IDLH) concentration levels while also providing improved mobility during tactical and technical operations
- Streamlined design combines durability, mobility and comfort
- Usable for multiple wears and washings, if not exposed or contaminated
- Rugged construction allows you to perform in the most challenging of circumstances
- Options include pockets, 3M Ventilated Trim™, Velcro® attachment points, MOLLE and playbook on forearm
- Certified for use with GORE® G9492™ glove system using GORE® CHEMPAK® Ultra Barrier Fabric
- Certified with variety of face pieces and boots, ask for the current listing

### APPLICATIONS

- SWAT
- HAZMAT
- Explosives ordnance disposal
- Clandestine lab entry
- Technical rescue in contaminated environment
- WMD or terrorist incident



HOT  
ZONEGORE™ CHEMPAK™  
PRODUCTSDuPont™  
Nomex®3M Scotchlite®  
Reflective Material  
3M and Scotchlite are  
trademarks of 3M company

## MT94 GARMENT SPECIFICATIONS

<b>Certification:</b>	NFPA 1994, Class 2 and NFPA 1992
<b>Zone:</b>	Hot
<b>Systemic Physiological Protective Dosage Factor (PPDFsys):</b>	Average PPDFsys 1,100–1,300
<b>Garment Design:</b>	One piece, rear and front entry designs
<b>Barrier Technology:</b>	GORE® CHEMPAK® Ultra Barrier Fabric
<b>Hand Protection System:</b>	GORE® G9492™ glove system with GORE® CHEMPAK® Ultra Barrier Fabric worn under Nomex® outer glove
<b>Foot Protection System:</b>	Integrated bootie with GORE® CHEMPAK® Ultra Barrier Fabric
<b>Respiratory System:</b>	Contact LION at CBRN@lionprotects.com for options
<b>Storage Life:</b>	Up to 10 years
<b>Multi-Use:</b>	Yes, if not damaged, exposed or contaminated
<b>Available Training Suit Models:</b>	CMTRN=71, CMTRNA=71, CMTRNF=71, CMTRNFE=71

## 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.

Challenge Chemical	MT94™ – Time to Breakthrough (minutes)
Acetone	>480
Acrolein <sup>(1)</sup>	>480
Acrylonitrile <sup>(1)</sup>	>480
Ammonia	>480
Benzyl Chloride	>480
Carbonyl Chloride (CO) <sup>(2,4)</sup>	>390
Chlorine <sup>(2)</sup>	>480
Chloroform	>480
Cyanogen Chloride (CK) <sup>(2,4)</sup>	>450
Dimethyl Sulfate (DMS) <sup>(2)</sup>	>480
Ethyl Ether	>480
Hexane	>480
Hydrogen Fluoride, HF (Gas)	43
Hydrofluoric Acid (48%)	>480
Hydrochloric Acid (37%)	>480
Hydrogen Chloride (Gas)	>480
Hydrogen Cyanide (HCN) <sup>(2)</sup>	>480
Hydrogen Peroxide (50%)	>480
Hydroiodic Acid (55%)	>480
Lewisite (L) <sup>(4)</sup>	>720
Methanol	>480
Mustard (HD) <sup>(4)</sup>	>720
Nitric Acid (70%)	>480
Sarin (GB) <sup>(2)</sup>	>720
Sodium Hydroxide (50%)	>480
Soman (GD) <sup>(2)</sup>	>720
Sulfuric Acid (98%)	>480
Thionyl Chloride	>480
Toluene	>480
V-Agent (VX) <sup>(2)</sup>	>720

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.

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.