

## **NAXIVUN PERFORMANCE** CHEMBIO GARMENTS

0

High-Performance CBRN PPE for Enhanced Dexterity & Superior Protection

HAZARDOUS WASTE | BIOLOGICAL THREATS | DRUG LAB ENTRY

## **3-ZONE PROTECTION**



CALL 1.800.421.2926

### **PROTECTIVE CLOTHING YOU CAN USE AGAIN**

Responding to chemical and bio-hazard incidents is often performed wearing disposable gear that is hot, humid, ill-fitting, and uncomfortable. LION's reusable NFPA-certified CBRN ensembles provide a better option to protect first responders against some of the world's worst chemical and biological threats.

LION CBRN garments are designed for comfort, mobility, and durability while meeting requirements for specific threat levels of hazard incidents. The MT94 (Multi-Threat) CBRN Ensemble is even NFPA Class 1 certified, which is equivalent to Level A protection.

Respond to hazardous waste, drug labs, biological threats and domestic terrorism agents in comfortable LION **CBRN** garments.

## **CLASS 1 IS LEVEL A**

# MT94 IS LEVEL A

LION's MT94<sup>™</sup> NFPA 1994 Class 1 certified ensemble is Level A equivalent, even without total encapsulation. This is because Level A is defined by the performance the ensemble has to protect the responders skin from exposure to hazards, not total encapsulation.

Less than 5% of hazmat calls require full encapsulation, (less than 1% according to FDNY), making MT94 a better, safer solution for most calls than hot and cumbersome fully encapsulated suits. LION's MT94 garments help increase responder safety and effectiveness by allowing longerperformance on scene and more removals per person when using operationally appropriate PPE.

MT94's advantages:

- Reduced don / doff time
- Reduced load
- Reduced heat stress
- Increased vision, no fogging
- Increased mobility and range of motion
- Increased glove dexterity

Learn more at https://rethinklevela.com

### **RETHINK LEVEL A ASSESS. SELECT. DEPLOY.**



## **MT94<sup>™</sup> GARMENT**

## **MULTI-THREAT PROTECTION**

The MT94 combines durability, mobility and comfort to meet the varied demands of law enforcement, fire, EOD and military.

#### BENEFITS

- One-piece suit with front or rear entry design for easy donning and fast response
- High strength, water absorbing fabric provides maximum protection, is flame resistant, and promotes conductive heat loss to reduce heat stress
- Form-fitting, lightweight design enables more tactical maneuverability and comfortable wear
- Certified with a variety of face pieces and boots for a wide range of versatility (ask for the current listing)



## **MT94<sup>™</sup> GARMENT**



MT94	GARMENT SPECIFICA	ATIONS	
Zone:	Limited Hot Zone Prote Protects against TICs a form for levels above li (IDLH) concentration	and CWAs in liquid, va	
Certification:	Certified to NFPA 1994, Class 1, Class 2 and NFPA 1992 Class 1 is Level A equivalent		1 NFPA 1992 Class
Dosage Factor:	Average PPDFsys 1,100 – 1,300		
	4th Gen	Agent	Results
		A-234	Pass
Nerve Agent Test Data*	Multi-Threat Fabric	A-230	Pass
	A-2	A-232	Pass
	G9492 Glove	A-230	Pass
Barrier Technology:	CHEMPAK® Ultra Barrier Fabric by GORE-TEX® Labs		EX® Labs
Hand Protection:	G9492™ glove system with CHEMPAK® ultra barrier glove liners by GORE-TEX® Labs worn under Nomex® outer glove		
Foot Protection:	Integrated bootie with CHEMPAK® Ultra Barrier Fabric by GORE-TEX® Labs		rier Fabric by
Usage:	10 wears/2 washes if not damaged, exposed or contaminated*		d or contaminated*
Storage:	Up to 10 years		
Applications:	<ul> <li>SWAT</li> <li>HAZMAT</li> <li>Explosives ordnance disposal</li> <li>Technical rescue in comtaminated environment</li> <li>WMD or terrorist incident</li> </ul>		

\* 24 hour permeation, LVAP method, 10g/m, challenge density

#### **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 (1)	>480
Acrylonitrile (1)	>480
Ammonia	>480
Benzyl Chloride	>480
Carbonyl Chloride (CG) (2, 6)	>390
Chlorine (2)	>480
Chloroform	>480
Cyanogen Chloride (CK) (2, 6)	>450
Dimethy Sulfate (DMS) (3)	>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) (2)	>480
Hydrogen Peroxide (50%)	>480
Hydroiodic Acid (55%)	>480
Lewisite (L) (4)	>720
Methanol	>480
Mustard (HD) (4)	>720
Nitric Acid (70%)	>480
Sarin (GB) <sub>(5)</sub>	>720
Sodium Hydroxide (50%)	>480
Soman (GD) <sub>(5)</sub>	>720
Sulfuric Acid (98%)	>480
Thionyl Chloride	>480
Toluene	>480
V-Agent (VX) (5)	>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/cm2/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, Priving 2007.

Edition 2001 or 2007.

Edition 2001 or 2007. (1) Chemical challenge concentration 350 ppm and 6 µg/cm2 breakthrough end point. (2) Chemical challenge concentration 1000 ppm and 0.1 µg/cm2/min breakthrough end point. (3) Chemical challenge concentration 10 g/m2 and 0.1 µg/cm2/min breakthrough end point. (4) Chemical challenge concentration 10 g/m2 and 4 µg/cm2 breakthrough end point. (5) Chemical challenge concentration 10 g/m2 and 1.25 µg/cm2 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 brites under controlled laberatorus conditions bui independent and accredited third, earth

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

## **MT94<sup>™</sup> GARMENT**



FACE SEAL INTERFACES WITH MULTIPLE FACE PIECES AND SCBAS

> Standard Features Available on certain configurations

-> VELCRO PATCHES **MIC TAB** 

C

RADIO POCKET

BELT KEEPERS REFLECTIVE TRIM

**OUTER GLOVES** INCLUDED

**CARGO POCKETS ON THIGHS** 

AVAILABLE IN TAN OR NAVY

**CERTIFIED WITH LION BY** THOROGOOD<sup>™</sup> BOOTS

## MT94-R<sup>™</sup> GARMENT

## MT94-R<sup>™</sup> GARMENT

### **RUGGEDIZED MULTI-THREAT**

The MT94-R includes a streamlined design for better mobility and improved interface with other equipment, making it ideal for law enforcement.

### BENEFITS

- One piece, rear entry garment for easy donning and doffing
- Durable construction with lighter weight hood and torso fabric allowing better interface with equipment
- Simplified design for better fit, form, and function
- Certified with a variety of face pieces and boots for a wide range of versatility (ask for the current listing)

MT94-R GARMENT SPECIFICATIONS			
Zone:	Hot Zone Operations Protection against TIC concentration levels	C's, TIM's and CWA's be	elow IDLH
Certification:	Certified to NFPA 199	94, Class 2R and NFPA	1992
Dosage Factor:	Average PPDFsys 1,1	00 - 1,300	
	4th Ge	n Agent	Results
		A-234	Pass
Nerve Agent Test Data*	Multi-Threat Fabric	A-230	Pass
		A-232	Pass
	G9492 Glove	A-230	Pass
Barrier Technology:	CHEMPAK® Ultra Ba	rrier Fabric by GORE-TI	EX® Labs
Hand Protection:		em with CHEMPAK® ul D Labs worn under Non	
Foot Protection:	Integrated bootie with GORE-TEX® Labs	n CHEMPAK® Ultra Bar	rrier Fabric by
Usage:	10 wears/2 washes i	f not damaged, expose	d or contaminated*
Storage:	Up to 10 years		
Applications:	<ul> <li>SWAT</li> <li>HAZMAT</li> <li>Explosives order disposal</li> </ul>	in c env hance WM	hnical rescue comtaminated rironment 1D or terrorist ident

\* 24 hour permeation, LVAP method, 10g/m, challenge density



REAR ENTRY WITH ATTACHED HOOD

CHEMPAK® ULTRA BARRIER FABRIC BY GORE-TEX® LABS

> HOOK AND LOOP WRIST CUFF © ADJUSTMENT

**Rear View** 



CONFORMABLE BOOTIES FIT COMFORTABLY IN BOOTS

### FACE SEAL INTERFACES WITH MULTIPLE FACE PIECES AND SCBAS

**VELCRO PATCH** 

#### AVAILABLE IN TAN OR NAVY

**BELT KEEPERS** 

CARGO POCKETS ON THIGHS

ELASTIC CUFFS

CERTIFIED WITH LION BY THOROGOOD<sup>™</sup> BOOTS

## **ERS<sup>™</sup> GARMENT**

## **ERS<sup>™</sup> GARMENT**

## **EXTENDED RESPONSE WEAR**

The ERS protects against lower levels of vapor and liquid concentrations that may be encountered in the Warm Zone when deployed with the proper ensemble.

### BENEFITS

- One-Piece, front entry garment for easy donning and fast response
- Breathable selectively permeable membrane reduces heat stress and body stress for longer mission time.
- Streamlined design for increased mobility and maximum dexterity
- Certified with a variety of face pieces and boots for a wide range of versatility (ask for the current listing)

ERS GARMENT SPECIFICATIONS			
Zone:		ns C's, TIM's and CWA's be and emerging pharmac	
Certification:	Certified to NFPA 199	94, Class 3 and NFPA 1	992
Dosage Factor:	Average PPDFsys 92	6	
	4th Gen Agent		Results
		A-234	Pass
Nerve Agent Test Data*	XRT Fabric	A-230	Pass
		A-232	Pass
	G9492 Glove	A-230	Pass
Barrier Technology:	CHEMPAK® Ultra Ba	rrier Fabric by GORE-TI	EX® Labs
Hand Protection:		glove by GORE-TEX LAN I Nomex® flight-style c	
Foot Protection:	Integrated bootie with fabric by GORE-TEX®	n CHEMPAK® Selective 9 Lab	ly permeable
Usage:	24 hour wear life/3 w contaminated*	vashes if not damaged,	exposed, or
Storage:	Up to 10 years		
Applications:	<ul> <li>Perimeter sect and control of environments</li> <li>Clandestine lat</li> <li>Decontamination</li> <li>Force protection</li> </ul>	CBRN rece indu o entry vict on ► EMS	dical triage/First eiver for WMD and ustrial accident im S response to cctious diseas

### **BARRIER CHEMICAL PERMEATION GUIDE**

Challenge Chemical	Challenge Level	Endpoint µg/cm2	8-Hour Cumulative Results
Acrolein	40 ppm	6	Pass
Acrylonitrile	40 ppm	6	Pass
Ammonia	40 ppm	6	Pass
Chlorine	40 ppm	6	Pass
Cyanogen Chloride	40 ppm	6	Pass
Dimethy Sulfate	10 g/m <sup>2</sup>	6	Pass
Hydrogen Cyanide	40 ppm	6	Pass
Mustard (HD)	40 ppm	6	Pass
Phosgene	40 ppm	6	Pass
Sarin (GB)	10 g/m <sup>2</sup>	6	Pass
Soman (GD)	10 g/m <sup>2</sup>	6	Pass
Tabun (GA)	10 g/m <sup>2</sup>	6	Pass
V-Agent (VX)	10 g/m <sup>2</sup>	6	Pass

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/cm2/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.

FACE SEAL INTERFACES WITH MULTIPLE FACE PIECES AND SCBAS

VELCRO PATCHES O

MIC TAB 👄

BELT KEEPERS • REFLECTIVE TRIM •

> OUTER GLOVES INCLUDED

CARGO POCKET ON THIGHS

Standard Features
 Available on certain configurations

CERTIFIED WITH LION BY THOROGOOD<sup>®</sup> BOOTS IN ADDITION TO ONGUARD AND TINGLEY OPTIONS

 $^{\star}$  24 hour permeation, LVAP method, 10g/m  $_{\rm 2}$  challenge density







### FRONT ENTRY AND NON-CERTIFIED HOODLESS MODELS AVAILABLE

### CHEMPAK® ULTRA BARRIER FABRIC BY GORE-TEX® LABS

#### **Rear View**



## FRS GARMENT

## **FRS GARMENT**

## **FLOOD RESPONSE WEAR**

The FRS is designed to keep out hazards that can be encountered in flood zones or stagnant water where wading is appropriate.

### BENEFITS

- Non-certified, hoodless garment with integrated booties for Cold Zone protection.
- Aquaseal waterproof zipper, neoprene collar, and butyl wrist cuffs aid in keeping out hazards while Hi-Vis reinforcements, pockets, and trim aid in visibility in low-light missions.

\* 24 hour permeation, LVAP method, 10g/m, challenge density

- Lightweight one-piece suit with front-entry design for easy donning and fast response.
- Breathable selectively permeable membrane allows reduces heat stress and body stress for longer mission time

	FRS	GARMENT SPECIFIC	ATIONS	
	Zone:		ns C's, TIM's and CWA's b and emerging pharmac	
	Certification:	Non-certified garment		
	Dosage Factor:	Average PPDFsys 92	6	
		4th Ge	n Agent	Results
			A-234	Pass
	Nerve Agent Test Data*	XRT Fabric	A-230	Pass
			A-232	Pass
		G9492 Glove	A-230	Pass
	Barrier Technology:	CHEMPAK® Ultra Ba	rrier Fabric by GORE-T	EX® Labs
	Other Protection:	Aquaseal water proo	f zipper, neoprene colla	r, and butyl cuffs
ł	Foot Protection:	Integrated bootie with fabric by GORE-TEX®	n CHEMPAK® Selective 9 Lab	ely permeable
-	Usage:	24 hour wear life/3 v contaminated*	vashes if not damaged,	exposed, or
	Storage:	Up to 10 years		
	Applications:	<ul> <li>Stagnant wate and rescue</li> <li>Escape from contaminated water environn</li> </ul>	rec wa stagnant > Cle	dical Triage / first eiver for stagnant ter accident victims an up (where no borne contaminants)







### **FRONT ENTRY ONLY**

RADIO POCKET

### CHEMPAK® ULTRA BARRIER FABRIC BY GORE-TEX® LABS

### BUTYL WRIST CUFFS





## **TRAINING SUIT**

TRAINING

## **ACCESSORIES & BOOTS**

## **GET PREPARED WITH** LION TRAINING SUITS

Responding effectively to emergencies requires practice, particularly in the case of stressful, strenuous and unpredictable HazMat and CBRN incidents.

The Training Suit was developed to provide realistic training for handling hazardous material emergencies. They have the exact form-fitting characteristics, look, and feel of LION's mission suits, without the protective properties.

- Offered in both four MT94 configurations as well as an ERS configuration.
- Aid in speeding up response time
- Ideal for practicing donning and doffing and for exercising under challenging conditions

Combine with LION training products and solutions, for complete familiarity with realistic and true-to-life equipment and events.

TRA	INING SUIT SPECIFICATIONS	
Zone:	Cold Zone - For training only	
Certification:	Non-certified garment	
	Mission Model	Training Suit
Available Suit Models:	MT94 - Rear	CMTRN=71, CMTRNA=71
	MT94 - Front	CMTRNFE=71, CMTRNFEA=71
	ERS	CBTRERA=70
Applications:	<ul> <li>Donning and doffing training</li> <li>Evacuation training</li> <li>Victim handling</li> <li>Breathing apparatus training (BA)</li> <li>BA reliance in stressful environment</li> </ul>	<ul> <li>BA coordination training</li> <li>BA breathing crisis training</li> <li>BA use in confined spaces</li> <li>Man Down</li> <li>BA habituation</li> </ul>

### HELLFIRE<sup>™</sup> FELT **INSULATED RUBBER BOOT**

### BENEFITS

- ▶ Flame/heat-resisting rubber
- Waterproof
- Removable Superknit covered, polyurethane footbed
- Steel triple-rib ladder shank
- Stainless steel puncture-resisting bottom plate
- Removable Superknit covered, polyurethane footbed
- HellFire traction Lug Sole
- Abrasion-resisting rubber T-toe
- Vulcanized construction
- Certified to meet NFPA 1971 structural and NFPA 1992 liquid splash
- CSA Z195-14 Edition-7

Available in whole and half sizes in 3 widths to ensure proper fit and comfort.

STYLE # 807-6003 MEN'S STYLE # 507-6003 WOMEN'S

Additional Certified Footwear that are approved for this ensemble: Thorogood Knockdown Elite - Model No.: 804-6389 or 504-6389 Thorogood Hellfire Rubber-Kevlar - Model No.: 807-6000 or 507-6000 OnGuard HazMax® Boot - Model No.: 87012 Tingley HazProof® Boot - Model No.: 82330 (orange) or 82331 (black)

## WATER-RESISTANT **NYLON GEAR BAG**

Designed with a variety of convenient storage compartments, this tough, multi-purpose bag makes it easy for you to carry along with you a CBRN ensemble (MT94™ or ERS), LION PPE or a change of clothes. Carry as a duffle or as a backpack.

Also available as a Drawstring Mesh Bag.









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Use LION's maximum performance Chembio garments to work for you. Check us out at your local LION dealer:

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