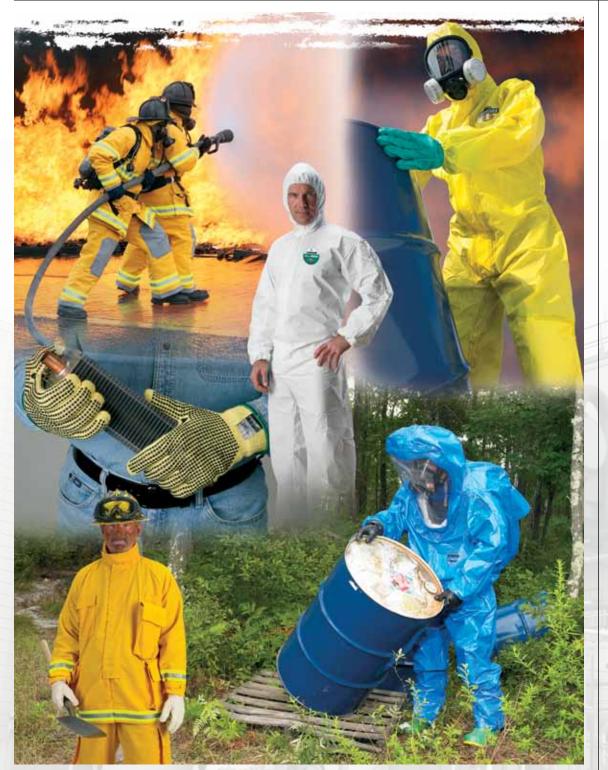
Lakeland Protective Wear Buyers Guide





Disposable Clothing Micromax® NS MicroMax® NS Cool Suit SafeGard® ZoneGard® Pyrolon® Plus 2

Chemical Protective Clothing Pyrolon® CRFR ChemMax® 1 ChemMax® 2 ChemMax® 3 ChemMax® 4 Interceptor®

Extrication Gear 911 Extrication Suits

Fire Fighter Turnout Gear OSX® Turnout Gear

Wildland Gear Smoke Jumper Wildland Gear

FR Coveralls FR Cotton Coveralls

Arm Protection Cut Resistant Sleeves Sleeves

SHIELD-APPAREL



Why Choose Lakeland?

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World's Largest Manufacturer of Protective Clothing

As the largest manufacturer, we are better able to deliver the best, most innovative Protective Clothing products and fabric choices available anywhere on earth... and we're stepping on the gas!

Know the Maker - We Manufacture Our Own Products

Lakeland protects people. It is our core business. Unlike our competitors, we don't use contractors to make our garments. We make them ourselves, so we have maximum control over quality and delivery. For most contractors, protective clothing is only a portion of their business, and they lack our expertise and focus on protecting the end user- whereas that is what we are all about. We design the fabric, we make the garment, we inspect it, we ship it. And you know who to call.

Broadest Range of Products and Fabrics

From Disposables to Chemical, Reflective to Hand and Arm, Flame/Arc Flash Resistant and Fire Service/EMS, no one else in the Protective Apparel Industry can offer such comprehensive product and fabric choices – or the expertise to guide you. All under one roof.

Award-winning service

In recent months, two of our largest customers have both named us best in customer service and support out of all their many vendors.

Investing for growth – to serve you better

We're doubling our sales and support personnel, increasing R&D and product development efforts, upgrading our systems, and streamlining our operations. You will see the difference.

World-wide presence and growth

Lakeland International is growing rapidly, with production and sales operations in more than 40 countries. So we can bring you the best in fabrics and innovations the world has to offer, and technical expertise for wherever you do business.

Let us help you protect your people, and grow with us!



Lakeland Brand Seams and Protection Levels

Serged Seam

A serged seam joins

with a thread that

interlocks. This is an

method for general

applications. This

stitching method is

generally not used for

chemical protective

clothing. It is more commonly found on disposable clothing where dry particulates are a concern.

economical stitching

two pieces of material

Bound Seam

A bound seam joins

with an overlay of

two pieces of material

similar material and is

chain stitched through

This provides increased

holdout of liquids and

dry particulates.

all of the layers for a

clean finished edge.



A heat sealed seam is

sewn and then sealed

with a heat activated

provides liquid proof

useful for Level A and

B chemical protective

clothing.

seams, and is especially

tape. This method



This is the ultimate

and strongest seam

that Lakeland offers. The seam is sewn and

then heat sealed on

to offer the highest

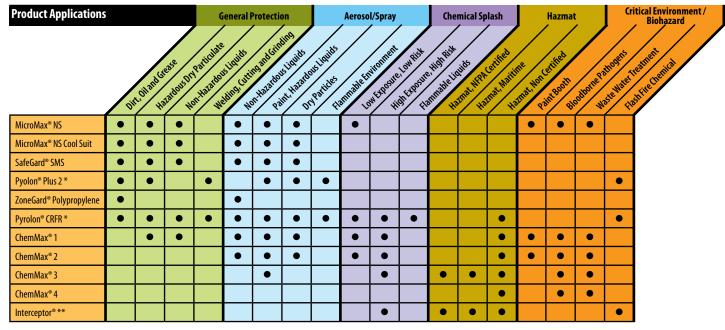
resistance.

the outside and inside

strength and chemical

Product Seam Availability

Product	Serged Seam	Bound Seams	Heat Sealed Seams
MicroMax [®] NS	•		
MicroMax [®] NS Cool Suit	•		
SafeGard® SMS	•		
Pyolon [®] Plus 2	•		
ZoneGard® Polypropylene	•		
Pyrolon [®] CRFR	•		•
ChemMax [®] 1	•	•	•
ChemMax [®] 2		•	•
ChemMax [®] 3			•
ChemMax [®] 4			•
Interceptor®			•



* Must be worn over thermally protective clothing, such as fire retardant cottons, aramids or mono acrylics.

** Interceptor meets the requirements of NFPA 1991 limited flash fire for escape only option.

MicroMax[®] NS

OTECTIVE WEAR, INC





Microporous protection from dirt, grease, grime and light chemical splash!

This line of general purpose protective clothing can be used in work environments where hazardous or non-hazardous contaminants may be present. Very economical and lightweight, MicroMAX® NS features high MVTR and is breathable for worker comfort. MicroMÁX® NS is strong, wet or dry, perfect for work environments where dirt, grime, splashes and spills are present. Note: Other coverall styles or accessories may be available. Call for details.

MicroMax[®] NS Physical Properties

Physical Property	Test Method	Units	Test Results
Basis Weight	ASTM D3776	oz/y ²	1.85 oz/y ²
Grab Tensile MD	ASTM D5034	lbs.	24.4 lbs.
Grab Tensile XD	ASTM D5034	lbs.	16.2 lbs.
Trapezoidal Tear MD	ASTM D1117	lbs.	10.8 lbs.
Trapezoidal Tear CD	ASTM D1117	lbs.	5.4 lbs.
Ball Burst	ASTM D3787	lbs.	25.1 lbs.
Air Permeability	ASTM D737	cfm	< 0.562 cfm/ft ²
Surface Resistivity	EN1149-5:2006	Ω	Pass
Blood	ASTM 1670/1671	-	Pass

MicroMax[®] NS ASTM F903 Penetration Data

Chemical Tested	Concentration %	Test Time – Minutes	Test Results
Diazinon	100%	60	Pass
Motor Oil-40 wt.	100%	60	Pass
Bleach-household	100%	60	Pass
Isocyanate Based Paint	100%	60	Pass
Sodium Hydroxide	50%	60	Pass
Sodium Hypochlorite	10%	60	Pass
Blood	Challenge Fluid Liter — 3.20 x 108 (PFU/mL)	Assay Results PFU/mL <1	Pass



Labcoat **CTL101**

MicroMax® NS Lab Coat, snap closure, 2 pockets, long sleeve. **Sizes**: S – 5X Case Pack: 30



Smock **CTL501**

MicroMax[®] NS Smock, long sleeves, attached ties. Sizes: S-5X Case Pack: 50



Shirt

CTL201

sleeves.

Apron

CTL601

sewn ties.

MicroMax® NS Apron,

Sizes: 28" w x 36" l

Case Pack: 100

Sizes: S – 5X

Case Pack: 50

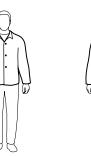
MicroMax® NS Shirt,

snap closure, long

Labcoat **CTL140** MicroMax® NS Lab Coat, snap closure, no pockets, long sleeve. Sizes: S – 5X Case Pack: 30



Pants **CTL301** MicroMax® NS Pants, elastic waist. Sizes: S - 5X Case Pack: 50



Coverall **CNS412** MicroMax[®] NS Coverall, zipper closure. Sizes: S – 5X Case Pack: 25

Sleeve

CTL850

elastic ends.

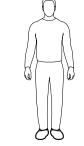
Sizes: 18" length

Case Pack: 100 pair

MicroMax[®] NS Sleeve,



Coverall **CNS414** MicroMax[®] NS Coverall, zipper closure, attached hood, boots, elastic wrists Sizes: S – 5X Case Pack: 25



Shoe Cover CTL901/CTL904 MicroMax[®] NS Shoe Cover, elastic ankles. Available with vinyl soles as Style CTL904. Sizes: S/M, L/XL, 2X Case Pack: 200 pair

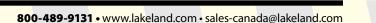


CNS417 Sizes: S – 5X Case Pack: 25

MicroMax[®] NS Coverall, zipper closure, elastic wrists and ankles.



Boot Cover CTL903 / CTL905 MicroMax® NS Boot Cover, elastic top, 17" high. Available with vinyl soles as Style CTL905. Sizes: S/M, L/XL, 2X Case Pack: 200 pair





Coverall **CNS428** MicroMax[®] NS Coverall, zipper closure, attached hood, elastic wrists and ankles Sizes: S - 5X

Case Pack: 25



2

MicroMax® NS Cool Suit







A breathable back panel makes the MicroMax[®] Cool Suit ideal for warmer work environments!

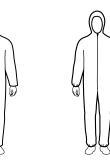
Like the MicroMAX® NS coverall, the MicroMAX NS Cool Suit™ protects against dirt, grease, spills and contaminants but features increased breathability with an added spunbond polypropylene back panel. A superb pattern design and an elastic back waist offer improved comfort and fit. Front and sides made of microporous film on a polypropylene substrate provide barrier protection and a flap cover over the zipper protects against splashes. The breathable back panel offers only a light particulate barrier. Stay cool while protecting yourself with the MicroMAX NS Cool Suit™.

MicroMAX[®] Cool Suit Physical Properties

Disci al Dava ata	Testhalest	United	To at Do sulta
Physical Property	Test Method	Units	Test Results
Basis Weight	ASTM D3776	oz/y ²	1.85 oz/y ²
Strip Tensile MD	ASTM D5035	lbs.	11.3 lbs.
Strip Tensile XD	ASTM D5035	lbs.	6 lbs.
Tensile Strength MD	ASTM D5034	lbs.	24.4 lbs.
Tensile Strength XD	ASTM D5034	lbs.	16.2 lbs.
Trap/Tear MD	ASTM D1117	lbs.	10.8 lbs.
Trap/Tear XD	ASTM D1117	lbs.	5.4 lbs.
Ball Burst	ASTM 3787	lbs.	25.1 lbs.
Taber Abrasion	ASTM 3884	cycles	1062 cycles
Mocon-Breathability			5031
Air Permeability	ASTM D737	cfm/ft2	<0.562
Surface Resistivity	ASTM D257		>1010
Hydrostatic Resistance	ASTM 4157	cfm	127+
Flammability Pass		lbs.	16 cfr 1610 cii

MicroMax[®] CoolSuit ASTM F903 Penetration Data

Chemical Tested	Concentration %	Test Time – Minutes	Test Results
Diazinon	100%	60	Pass
Motor Oil-40 wt.	100%	60	Pass
Bleach-household	100%	60	Pass
Isocyanate Based Paint	100%	60	Pass
Sodium Hydroxide	50%	60	Pass
Sodium Hypochlorite	10%	60	Pass
Blood	Challenge Fluid Liter — 3.20 x 108 (PFU/mL)	Assay Results PFU/mL <1	Pass



Coverall COL412 MicroMax® NS Cool Suit Coverall, zipper closure. Sizes: S – 5X Case Pack: 25

Coverall COL428 MicroMax® NS Cool Suit Coverall, zipper closure, attached hood, elastic wrists and ankles. Sizes: S – 5X Case Pack: 25

Note: Other coverall styles or accessories may be available. Please call for details.

SafeGard® SMS





Get great protection and breathability too with SafeGard[®] SMS!

SafeGard® SMS Protective Garments from Lakeland Industries, Inc. are well named. They keep employees safe from numerous dry particles and water-based liquids. SafeGard® garments can be used in work environments where hazardous or non-hazardous contaminants may be present. These garments feature 3 tough layers to keep contaminants out. The 2 outer layers are made of spunbonded filaments that stand up to tearing and abrasion. The inner layer is of melt-blown polypropylene microfibers that filter out potentially harmful particulates and liquids.

Breathability is the bonus; air and water vapor pass through for superior wearer comfort.

Coveralls feature a deluxe pattern with 2 sewn pockets and elastic in the back. Available in White or Navy Blue.

SafeGard[®] Physical Properties

Physical Property	Test Method	Units	Test Results
Basis Weight	ASTM D3776	oz/y ²	1.5 oz/y ²
Grab Tensile MD	ASTM D5034	lbs.	25 lbs.
Grab Tensile XD	ASTM D5034	lbs.	20 lbs.
Trap Tear MD	ASTM D5733	lbs.	7.9 lbs.
Trap Tear XD	ASTM D5733	lbs.	6.7 lbs.



Labcoat C8101 SafeGard[®] Lab Coat, snap closure, 2 pockets, long sleeve. Sizes: S - 5X Case Pack: 30



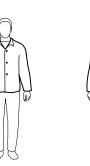
Labcoat C8140 SafeGard® Lab Coat, snap closure, no pockets, long sleeve. Sizes: S – 5X Case Pack: 30

Shirt

C8201

Sizes: S – 5X

Case Pack: 50



Coverall C8412 SafeGard® Coverall, SafeGard[®] Shirt, snap zipper closure. closure, long sleeves. Sizes: S – 5X Case Pack: 25



Coverall **C8414** SafeGard[®] Coverall, zipper closure, attached hood, boots, elastic wrists. Sizes: S – 5X Case Pack: 25



Coverall C8417 SafeGard[®] Coverall, zipper closure, elastic wrists and ankles. Sizes: S – 5X Case Pack: 25

Coverall **C8428** SafeGard[®] Coverall, zipper closure, attached hood, elastic wrists and ankles. Sizes: S – 5X Case Pack: 25





All SafeGard® garments are available in white (WSF) or Navy Blue (NSF).

Note: Other coverall styles or accessories may be available. Please call for details.

ZoneGard® Polypropylene





ZoneGard® – Cool clothing for Grimy Sites.

Lakeland's line of breathable ZoneGard® protective wear is appropriate for use in work environments where hazardous or non-hazardous contaminants may be present. Their porous construction accounts for a "breathability" that makes them cool and comfortable while offering protection to those who must work around constant dirt and grime. Economical and disposable, these Lakeland garments and accessories come in a range of styles and sizes.

ZoneGard® Physical Properties				
Physical Property Test Method Units Test Results				
Basis Weight	ASTM D3776	oz/y ²	1.25 oz/y ²	



Labcoat C2101 ZoneGard® Lab Coat, snap closure, 2 pockets, long sleeve. Sizes: S – 5X Case Pack: 30



C2140 ZoneGard® Lab Coat, snap closure, no pockets, long sleeve. **Sizes**: S – 5X **Case Pack**: 30



Coverall C2428N ZoneGard® Coverall, zipper closure, attached hood, elastic wrists and ankles. Sizes: S – 5X Case Pack: 25



All ZoneGard® garments are available in white or navy. For Navy, add an "N" at the end of the style number.

Note: Other coverall styles or accessories may be available. Please call for details.

Pyrolon[®] Plus 2



Perfect for use over thermally protective and arc protective clothing!

From coveralls to lab coats to dosimeter stripped nuclear wear, disposable clothing of Pyrolon® Plus 2 come with all the essential features, distinct advantages and assurances of protection that only quality design and materials can deliver. Second generation Pyrolon® Plus 2 offers wet or dry strength superior to that provided by other traditional Flame Resistant disposables. Pyrolon® Plus 2 is breathable, making this a cool and comfortable garment to wear. Pyrolon® Plus 2 can be used in work environments where hazardous or non-hazardous contaminants may be present. Pyrolon® Plus 2 quality standards meet ANSI/ISEA 101.

Designed to be worn over woven thermally protective coveralls, such as woven Nomex[®], for environments where flash fire is a concern.

Do not use for fire protection. Avoid open flame or intense heat. Pyrolon[®] Plus 2 garments are not washable. Washing removes the special finishes, thereby removing the flame retardancy, water and oil repellent characteristics.

Note: Other coverall styles or accessories may be available. Please call for details.

Pyrolon[®] Plus 2 Physical Properties

Serged Seams

Physical Property	Test Method	Units	Test Results
Basis Weight	ASTM D3776	oz/y ²	2.4 oz/y ²
Grab Tensile MD	ASTM D5034	lbs.	31.0 lbs.
Grab Tensile XD	ASTM D5034	lbs.	20.0 lbs.
Trapezoidal Tear MD	ASTM D5733	lbs.	4.5 lbs.
Trapezoidal Tear CD	ASTM D5733	lbs.	5.6 lbs.
Air Permeability	ASTM D737	cfm	52 cfm
Char Length MD	ASTM D6413	inches	3.70 inches
Char Length XD	ASTM D6413	inches	3.70 inches
Ignition Point	-	degrees F	1000° F
Charge Decay	NFPA 99		Pass

Dry Particulate

Flame Retardant



Coverall 07428

07428 Pyrolon® Plus 2 Coverall, zipper closure, attached hood, elastic wrists and ankles. Sizes: S – 5X Case Pack: 25

All Pyrolon® Plus 2 garments are available in white or Blue. For Blue, add a "B" at the end of the style number.

Pyrolon[®] CRFR .5 Mil



Disposable, Chemical Resistant, and Flame Retardant Protection.

Pyrolon[®] CRFR is disposable, chemical resistant, and flame retardant, meeting NFPA 2113 requirements.

Pyrolon® CRFR garments bar contaminating flammables like paint, oil and grease, hazardous liquids and contaminants, and dry particulates from penetrating to inner clothing.

Pyrolon[®] CRFR features:

- 0.5 mil material
- Light chemical splash protection
- Self extinguishing
- Won't melt or drip
- Meets NFPA 2113 requirements
- Designed to be worn over woven thermally protective coveralls, such as woven Nomex[®], for environments where flash fire is a concern.

Pyrolon[®] CRFR .5 Mil Physical Properties

Physical Property	Units	Specification
Basis Weight	(oz./sq.yd.)	2.92
Grab Tensile	MD (lbs. / kg.) XD (lbs. / kg.)	34.2/15.5 24.2/10.9
Trap Tear	MD (lbs. / kg.) XD (lbs. / kg.)	7.2/3.2 7.9/3.5
Mullen Burst	(Ib./sq.in.)	27.2
Char Length	MD (inches / cm) XD (inches / cm)	4.1 in. 4.0 in.
Afterflame	(seconds)	<2.0
Thermal Protective Performance (TPP)	(cal./cm2)	5.1
Surface Resistance	EN1149-1:2006	Pass



37428 Serged Seams Coverall, attached hood with elastic face, storm flap over zipper, elastic wrists and ankles. Sizes: S - 5XL Case Pack: 6

Pyrolon[®] CRFR 2.0 Mil



Dry Particulate

Heat Sealed Liquid Splash/ **Chemical Barrier**

Flame Retardant





Coverall, collar, storm flap

over zipper, elastic wrists

51110

and ankles.

Sizes: S - 5XL

Case Pack: 6

51100 Coverall, collar, storm flap over zipper, open wrists and ankles hemmed cuff. Sizes: S - 5XL Case Pack: 6



51130 Coverall, attached hood with elastic face, storm flap over zipper, elastic wrists and ankles. Sizes: S - 5XL Case Pack: 6



51150 Coverall, hood, elastic face and wrists, storm flap over zipper, attached boots. Sizes: S - 5XL Case Pack: 6

Disposable, Chemical Resistant, and Flame Retardant, all rolled into one garment.

Pyrolon[®] CRFR protective wear...They're unique. They're disposable. They're chemical resistant. And they're flame retardant, meeting NFPA 2113 requirements. Imagine, all these qualities in one protective garment. Only from Lakeland.

Pyrolon[®] CRFR garments bar contaminating flammables like paint, oil and grease, hazardous liquids and contaminants, and dry particulates from penetrating to inner clothing.

Pyrolon[®] CRFR features:

- 2.0 mil, sealed seam Level B
- Light chemical splash protection
- Self extinguishing
- Won't melt or drip
- Meets NFPA 2113 requirements
- Designed to be worn over woven thermally protective coveralls, such as woven Nomex®, for environments where flash fire is a concern.



51120 Coverall, hood, elastic face, storm flap over zipper, open wrists and ankes, hemmed cuffs. Sizes: S - 5XL Case Pack: 6



Coverall, expanded back for SCBA, hood, storm flap over zipper, elastic face, wrists, over boots. Sizes: S - 5XL Case Pack: 6

Pyrolon® CRFR Physical Properties

Seams

Physical Property	Units	Specification
Basis Weight	(oz./sq.yd.)	4.33
Grab Tensile	MD (lbs. / kg.) XD (lbs. / kg.)	37.1/ 16.82 30.7/ 13.92
Trap Tear	MD (lbs. / kg.) XD (lbs. / kg.)	9.0 / 4.08 11.9 / 5.39
Mullen Burst	(lb./sq.in.)	45
Char Length	MD (inches / cm) XD (inches / cm)	5.0 in 4.8 in
Afterflame	(seconds)	<2
Thermal Protective Performance (TPP)	(cal./cm2)	4.47
Surface Resistance	EN1149-1:2006	Pass

Pyrolon[®] CRFR Penetration Data

Chemical	Thickness (mils)	Time to Penetrate
Acetone	12	>60
Acetonitrile	12	>60
Acetonitrile	12	>60
Benzene	12	>60
Carbon Disulfide	12	>60
Dichloromethane	13	>60
Diethylamine	12	>60
Dimethylformamide	12	>60
Ethyl Acetate	12	>60
Hexane	13	>60
Hexamethylene Diisocyanate	12	>60
Hydrochloric Acid	12	>60
Methanol	12	>60
Methyl Isobutyl Ketone	12	>60
Monochlorobenzene	12	>60
Nitrobenzene	12	>60
n-Butyl Acetate	12	>60
Orthodichlorobenzene, Grade F	12	>60
Para-Dichlorobenzene	12	>60
Sodium Hydroxide	13	>60
Sulfuric Acid	13	>60
Tetrachlorethylene	13	>60
Tetrahydrofuran	13	>60
Toluene	12	>60
Trichlorobenzene Mixture	12	>60
Xylene	12	>60

Note: Chemical Resistance Data is in accordance with ASTM F-903 test method. Testing is performed on fabric samples only, not finished garments. Sources for all test data are independent laboratory conditions and not actual use conditions.

Note: Other coverall styles or accessories may be available. Please call for details.

ChemMax[®] 1

OTECTIVE WEAR. INC



Drv Particulate



Heat Sealed Seams







Entry Level Chemical Protective Garment.

You've come to expect quality from Lakeland Industries. We've utilized our vast knowledge in the industry to develop a superior product in ChemMax[®] 1. Offering quality along with durability, this cost-effective entry level product will please distributors, safety engineers and plant purchasing managers. Whether you are in manufacturing, environmental clean up or chemical handling, you can trust the ChemMax® family of products to protect your workers from harm.

ChemMax[®] is constructed with a unique polyethylene barrier film and a continuous filament polypropylene nonwoven substrate. ChemMax®1 garments bar many harmful contaminants from penetrating to inner clothing. Available with serged, bound and sealed seams for scalability, ChemMax® fits the Lakeland standard at a price you can afford.

C5412 Serged Seam C55412 Bound Seam* Coverall, zipper. *Bound seams have storm flap over zipper. Sizes: S - 5XL Case Pack: 25



C5414 Serged Seam C5417 Serged Seam C55414 Bound Seam* C55417 Bound Seam* Coverall, zipper, attached Coverall, zipper, elastic hood, boots, elastic wrists. wrists and ankles. *Bound seams have storm flap over zipper. flap over zipper. Sizes: S - 5XL Sizes: S - 5XL Case Pack: 25 Case Pack: 25



C70100 Sealed Seam Coverall, collar, open wrists and ankles, storm flap over zipper. Sizes: S - 5XL Case Pack: 6

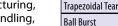


C70130 Sealed Seam Coverall, hood, elastic face, wrists and ankles, storm flap over zipper. Sizes: S – 5XL Case Pack: 6



*Bound seams have storm





ChemMax® 1 Physical Properties

Property	Test Method	Units	ChemMax [®] 1
Basis Weight	ASTM D3776	oz/sy	2.29
Grab Tensile MD	ASTM D5034	pounds	35
Grab Tensile XD		pounds	27
Trapezoidal Tear MD	ASTM D5733	pounds	13.8
Trapezoidal Tear XD		pounds	14.2
Ball Burst	ASTM D751	pounds	25.5

Permeation Data for ASTM Recommended List of Chemicals for Evaluating Protective Clothing Materials (ASTM F1001)

Challenge Chemical	CAS Number	Physical State	ChemMax® 1
Acetone	67-64-1	Liquid	imm.
Acetonitrile	75-05-8	Liquid	imm.
Ammonia Gas	7664-41-7	Gas	imm.
1,3-Butadiene Gas	106-99-0	Gas	imm.
Carbon Disulfide	75-15-0	Liquid	imm.
Chlorine Gas	7782-50-5	Gas	imm.
Dichloromethane	75-09-2	Liquid	imm.
Diethylamine	109-89-7	Liquid	imm.
Dimethyl Formamide	68-12-2	Gas	40 minutes
Ethyl Acetate	141-78-6	Liquid	imm.
Ethylene Oxide Gas	75-21-8	Gas	imm.
n-Hexane	110-54-3	Liquid	imm.
Hydrogen Chloride Gas	7647-01-0	Gas	imm.
Methanol	67-56-1	Liquid	imm.
Methyl Chloride Gas	74-87-3	Gas	imm.
Nitrobenzene	98-95-3	Liquid	45 minutes
Sodium Hydroxide, 50%	1310-73-2	Liquid	>480
Sulfuric Acid, 98%	7664-93-9	Liquid	>480
Tetrachloroethylene	127-18-4	Liquid	imm.
Tetrahydrofuran	109-99-9	Liquid	imm.
Toluene	108-88-3	Liquid	imm.

ND = None Detected

> = greater than

L = liquidG = gas

C5428 Serged Seam

Coverall, zipper, attached

hood, elastic wrists and

*Bound seam has storm

flap over zipper and a

respirator fit hood.

Sizes: S – 5XL

Case Pack: 25

C1B428-szY **Bound Seam***

ankles

Numbers reported are averages of samples tested by the ASTM F739 test method. Sample results do vary and therefore averages for these results are reported.

Warnings:

1. ChemMax[®] 1 is not flame resistant and should not be used around heat, flame sparks, or in potentially flammable or explosive environments.

2. Garments made of ChemMax[®] 1 should have slip resistant or anti-slip materials on the outer surface of boots, shoe covers or other garment surfaces in conditions where slipping could occur.

Note: Chemical Resistance Data is in accordance with ASTM F-739 test method. Testing is performed on fabric samples only, not finished garments. Sources for all test data are independent laboratory conditions and not actual use conditions.

Note: Other coverall styles or accessories may be available. Please call for details.

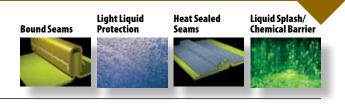
LAKELAND PROTECTIVE WEAR

ChemMax[®] 2



ChemMax® 2 offers quality, value, durability and the proven protection of Dow Saranex® 23P barrier film.

ChemMax[®] 2 is the second level of barrier protection in the new ChemMax® line of products from Lakeland Industries. ChemMax® 2 is a superior and economical chemical protective suit developed using the knowledge and expertise that you have come to expect from Lakeland. The unparalleled strength and softness of ChemMax® 2' features Dow Saranex[®] 23P film on two layers of a unique bi-component spunbond nonwoven substrate and provides protection for chemical mixing and handling, environmental clean up, hazardous materials remediation and response, pharmaceutical manufacturing, spray painting and general industry. ChemMax® 2 is useful in protecting against hazardous chemicals and contaminants found in the work place.



ChemMax[®] 2 Physical Properties

Property	Test Method	Units	ChemMax® 2
Basis Weight	ASTM D3776	oz/sy	4.3
Grab Tensile MD	ASTM D5034	pounds	47
Grab Tensile XD	ASTM D5034	pounds	33.9
Trapezoidal Tear MD	ASTM D5733	pounds	29.95
Trapezoidal Tear XD	ASTM D5733	pounds	12.47
Ball Burst	ASTM D751	pounds	48
Surface Resistance	EN1149-1:2006	Pass/Fail	Pass

Permeation Data for ASTM Recommended List of Chemicals for Evaluating Protective Clothing Materials (ASTM F1001)

Challenge Chemical	CAS Number	Physical State	ChemMax® 2
Acetone	67-64-1	Liquid	9
Acetonitrile	75-05-8	Liquid	<15
Ammonia Gas	7664-41-7	Gas	15
1,3-Butadiene Gas	106-99-0	Gas	>480
Carbon Disulfide	75-15-0	Liquid	imm.
Chlorine Gas	7782-50-5	Gas	>480
Dichloromethane	75-09-2	Liquid	imm.
Diethylamine	109-89-7	Liquid	imm.
Dimethyl Formamide	68-12-2	Gas	18
Ethyl Acetate	141-78-6	Liquid	21
Ethylene Oxide Gas	75-21-8	Gas	24
n-Hexane	110-54-3	Liquid	21
Hydrogen Chloride Gas	7647-01-0	Gas	>410
Methanol	67-56-1	Liquid	>480
Methyl Chloride Gas	74-87-3	Gas	>480.
Nitrobenzene	98-95-3	Liquid	45
Sodium Hydroxide, 50%	1310-73-2	Liquid	>480
Sulfuric Acid, 98%	7664-93-9	Liquid	>480
Tetrachloroethylene	127-18-4	Liquid	imm.
Tetrahydrofuran	109-99-9	Liquid	imm.
Toluene	108-88-3	Liquid	imm.

ND = None Detected



L = liquid



Numbers reported are averages of samples tested by the ASTM F739 test method. Sample results do vary and therefore averages for these results are reported.

Warnings:

1. ChemMax[®] 2 is not flame resistant and should not be used around heat, flame sparks, or in potentially flammable or explosive environments.

2. Garments made of ChemMax[®] 2 should have slip resistant or anti-slip materials on the outer surface of boots, shoe covers or other garment surfaces in conditions where slipping could occur.

Note: Chemical Resistance Data is in accordance with ASTM F-739 test method. Testing is performed on fabric samples only, not finished garments. Sources for all test data are independent laboratory conditions and not actual use conditions.

Note: Other coverall styles or accessories may be available. Please call for details.



C44412 Bound Seam Coverall, storm flap over zipper. Sizes: S – 5XL Case Pack: 12



C72110 Sealed Seam Coverall, collar, storm flap over zipper, elastic wrist and ankles. Sizes: S – 5XL Case Pack: 6



C44414 Bound Seam

Coverall, storm flap over

zipper, attached hood,

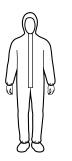
boots, elastic wrists.

Sizes: S - 5XL

C72132 Sealed Seam Coverall, respirator fit hood, storm flap over zipper, elastic face, wrists and ankles. **Sizes**: S – 5XL **Case Pack**: 6



C44417 Bound Seam Coverall, storm flap over zipper, elastic wrists and ankles. Sizes: S – 5XL Case Pack: 12



C72150 Sealed Seam Coverall hood, storm flap over zipper, elastic face, elastic wrists, and attached boots. Sizes: S – 5XL Case Pack: 6

C72165 Sealed Seam

C44428 Bound Seam

Coverall, storm flap over

elastic wrists and ankles.

zipper, attached hood,

Sizes: S - 5XL

Case Pack: 12

Sealed Seam, coverall with respirator fit hood, double storm flap with Velcro, elastic wrists and attached sock boots and boot flaps. Sizes: S – 5XL Case Pack: 6

ChemMax[®] 3

OTECTIVE WEAR, INC



Advanced chemical protection for industrial, emergency responder and law enforcement.

ChemMax[®] 3 uses the latest technology to produce a superior product. Durable and lightweight, ChemMax® 3 provides a barrier against a broad spectrum of toxic industrial chemicals, dual use chemicals, chemical warfare agents and other harmful contaminants.

The multi-layer film is applied to a heavy polypropylene nonwoven substrate for increased strength and durability. The barrier film is significantly softer than other products on the market, resulting in a quiet, more comfortable garment.

Put your trust in a ChemMax® 3 garment and you will feel confident that you are doing your best to protect your team from the dangers lurking around them.



C3T110 Coverall, collar, storm flap over zipper, elastic wrists and ankles. Sizes: S – 5XL Case Pack: 6



C3T160 Coverall, hood, storm flap over zipper, elastic wrists, sock boots with flaps. Sizes: S – 5XL Case Pack: 6



Coverall, respirator fit hood, storm flap over zipper, elastic face, wrists and ankles. Sizes: S – 5XL Case Pack: 6



C3T165N NFPA 1992, 2007 Edition Coverall, attached respirator-fit hood, double storm flap with hook and loop closure, elastic face and wrists, attached boots with boot flaps, sealed Sizes: S - 5XL Case Pack: 6

seams.



C3T150 Coverall, hood, elastic face and wrists, storm flap over zipper, attached boots. Sizes: S - 5XL Case Pack: 6 Case Pack: 6



C3T400 Encapsulated suit, rear entry, flat back, 48" zipper, storm flap, 20 mil PVC face shield, elastic wrists, 1 exhaust port with shroud, air tube inlet, attached sock boots with boot flap. Suit is not gas/vapor tight. Sizes: S - 5XL Case Pack: 1

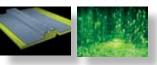
C3T151 Coverall, respirator-fit hood, elastic face, storm flap over zipper, elastic wrists and attached boots. Sizes: S - 5XI



C3T450, Level B Encapsulated suit, rear entry, expanded back, 48" zipper, storm flap, 20 mil PVC face shield, elastic wrists, 2 exhaust ports with shroud, air tube inlet, attached sock boots with boot flap. Suit is not gas/ vapor tight. Sizes: S – 5XL Case Pack: 1



Liquid Splash/ **Chemical Barrier**



ChemMax® 3 Physical Properties

Property	Test Method	Units	ChemMax® 3
Basis Weight	ASTM D3776	oz/sy	4.5
Grab Tensile MD	ASTM D5034	pounds	58.7
Grab Tensile XD		pounds	42.2
Trapezoidal Tear MD	ASTM D5733	pounds	25.6
Trapezoidal Tear XD		pounds	19.8
Ball Burst	ASTM D751	pounds	54.5
Surface Resistance	EN1149-1:2006	Pass/Fail	Pass

Permeation Data for ASTM Recommended List of Chemicals for Evaluating Protective Clothing Materials (ASTM F1001)

Challenge Chemical	CAS Number	Physical State	ChemMax® 3
Acetone	67-64-1	Liquid	>480
Acetonitrile	75-05-8	Liquid	>480
Ammonia Gas	7664-41-7	Gas	>480
1,3-Butadiene Gas	106-99-0	Gas	>480
Carbon Disulfide	75-15-0	Liquid	178
Chlorine Gas	7782-50-5	Gas	>480
Dichloromethane	75-09-2	Liquid	>480
Diethylamine	109-89-7	Liquid	imm.
Dimethyl Formamide	68-12-2	Gas	>480
Ethyl Acetate	141-78-6	Liquid	>480
Ethylene Oxide Gas	75-21-8	Gas	>480
n-Hexane	110-54-3	Liquid	>480
Hydrogen Chloride Gas	7647-01-0	Gas	>480
Methanol	67-56-1	Liquid	>480
Methyl Chloride Gas	74-87-3	Gas	>480.
Nitrobenzene	98-95-3	Liquid	>480
Sodium Hydroxide, 50%	1310-73-2	Liquid	>480
Sulfuric Acid, 98%	7664-93-9	Liquid	>480
Tetrachloroethylene	127-18-4	Liquid	>480
Tetrahydrofuran	109-99-9	Liquid	320
Toluene	108-88-3	Liquid	>480

ND = None Detected

> = greater than

L = liquid

G = gas

Numbers reported are averages of samples tested by the ASTM F739 test method. Sample results do vary and therefore averages for these results are reported.

Warnings:

1. ChemMax[®] 3 is not flame resistant and should not be used around heat, flame sparks, or in potentially flammable or explosive environments.

2. Garments made of ChemMax[®] 3 should have slip resistant or anti-slip materials on the outer surface of boots, shoe covers or other garment surfaces in conditions where slipping could occur.

Note: Chemical Resistance Data is in accordance with ASTM F-739 test method. Testing is performed on fabric samples only, not finished garments. Sources for all test data are independent laboratory conditions and not actual use conditions.

Note: Other coverall styles or accessories may be available. Please call for details.

ChemMax[®] 4





Heavy Duty Chemical Splash Protection that is high in performance and comfort!

This line of high performance chemical protection can be used in work environments where hazardous or non-hazardous contaminants may be present.

ChemMax[®] 4 is at the top of the ChemMax line of clothing. ChemMax[®] 4 features a 6 layer protective substrate that will stand up to the toughest of hazardous chemical environments.

ChemMax[®] 4 Physical Properties

Property	Test Method	Units	ChemMax® 4
Basis Weight	ASTM D3776	oz/sy	6.5
Grab Tensile MD	ASTM D5034	pounds	112
Grab Tensile XD		pounds	90
Trapezoidal Tear MD	ASTM D5733	pounds	51.2
Trapezoidal Tear XD		pounds	37.2
Ball Burst	ASTM D751	pounds	141

Permeation Data for ASTM Recommended List of Chemicals for Evaluating Protective Clothing Materials (ASTM F1001)

Challenge Chemical	CAS Number	Physical State	ChemMax [®] 4
Acetone	67-64-1	Liquid	>480
Acetonitrile	75-05-8	Liquid	>480
Ammonia Gas	7664-41-7	Gas	>480
1,3-Butadiene Gas	106-99-0	Gas	>480
Carbon Disulfide	75-15-0	Liquid	>480
Chlorine Gas	7782-50-5	Gas	>480
Dichloromethane	75-09-2	Liquid	>480
Diethylamine	109-89-7	Liquid	>480
Dimethyl Formamide	68-12-2	Gas	>480
Ethyl Acetate	141-78-6	Liquid	>480
Ethylene Oxide Gas	75-21-8	Gas	>480
n-Hexane	110-54-3	Liquid	>480
Hydrogen Chloride Gas	7647-01-0	Gas	>480
Methanol	67-56-1	Liquid	>480
Methyl Chloride Gas	74-87-3	Gas	>480.
Nitrobenzene	98-95-3	Liquid	>480
Sodium Hydroxide, 50%	1310-73-2	Liquid	>480
Sulfuric Acid, 98%	7664-93-9	Liquid	>480
Tetrachloroethylene	127-18-4	Liquid	>480
Tetrahydrofuran	109-99-9	Liquid	>480
Toluene	108-88-3	Liquid	>480

ND = None Detected

> = greater than

L = liquid

G = gas

Numbers reported are averages of samples tested by the ASTM F739 test method. Sample results do vary and therefore averages for these results are reported.

Warnings:

1. ChemMax[®] 4 is not flame resistant and should not be used around heat, flame sparks, or in potentially flammable or explosive environments.

2. Garments made of ChemMax[®] 4 should have slip resistant or anti-slip materials on the outer surface of boots, shoe covers or other garment surfaces in conditions where slipping could occur.

Note: Chemical Resistance Data is in accordance with ASTM F-739 test method. Testing is performed on fabric samples only, not finished garments. Sources for all test data are independent laboratory conditions and not actual use conditions.



42132 (Tan)

ChemMax[®] 4 coverall,

attached respirator fit

hood, elastic face, storm

flap over zipper, elastic

wrists and ankles.

Sizes: S - 5X

42110 (Tan) ChemMax[®] 4 coverall, collar, storm flap over zipper, elastic wrists and ankles. Sizes: S – 5X Case Pack: 6



42165 (Tan) ChemMax[®] 4 coverall, respirator fit hood, double storm flap with hook and loop closure, elastic face and wrists, attached sock boots with boot flaps. **Sizes**: S – SX **Case Pack**: 6

Note: Other coverall styles or accessories may be available. Please call for details.

42150 (Tan)

Sizes: S - 5X

Case Pack: 6

ChemMax® 4 coverall,

hood, elastic face, storm

wrists and attached boots.

flap over zipper, elastic



42151 (Tan) ChemMax[®] 4 coverall, respirator fit hood, storm flap over zipper, elastic face and wrists, attached boots. Sizes: S – SX Case Pack: 6

800-489-9131 • www.lakeland.com • sales-canada@lakeland.com

11

Interceptor®

OTECTIVE WEAR, INC



Interceptor[®] is your first line of defense against extreme chemical hazards.

Interceptor[®] is the apex of Lakeland Industries' chemical protective clothing line. Manufactured to both NFPA 1991 and CE type 1 requirements and available in encapsulating and non-encapsulating configurations, there is an Interceptor[®] suit for your needs be it gas, vapor, aerosol, liquids, harmful contaminants or particulate protection.

Interceptor Features

- Patented ShurSeal Teflon® visor process permanently seals the visor into the suit with no sewing involved so that liquids can't penetrate the visor edge
- Certified to optional Flash Fire Protection for Escape Only requirements of NFPA 1991
- Available in NFPA 1991 and CE Type 1 certified ensembles as well as non-certified encapsulating and non-encapsulating configurations
- Teflon outer layer on visor prevents impairment of vision due to chemical contact
- All NFPA certified Interceptor[®] ensembles include Tingley HazProof[®] boots and a storage bag



80645 80645W - Wide-View Face Shield

Blue Vapor tight (Level A) NFPA 1991, 2005 Certified Ensemble- Fully encapsulated, front-entry vapor-protective suit. Available in wide-view face shield configuration as 80645W. Sizes: S – 5X Case Pack: 1



80655 80655W - Wide-View Face Shield

Blue Vapor tight (Level

Certified Ensemble- Fully

encapsulated, rear-entry

vapor-protective suit.

Available in wide-view

80655W.

Sizes: S - 5X

Case Pack: 1

face shield configuration as

A) NFPA 1991, 2005

Face Shield Blue Vapor tight (Level A) Deluxe Ensemble-Fully encapsulated, front-entry vapor-protective suit. Available in wide-view face shield configuration as 80640W. Sizes: S – 5X Case Pack: 1

80640W - Wide-View

80640



80650 80650W - Wide-View Face Shield

Blue Vapor tight (Level A) Deluxe Ensemble- Fully encapsulated, rear-entry vapor-protective suit. Available in wide-view face shield configuration as 80650W. Sizes: 5 – 5X Case Pack: 1

Note: Other coverall styles or accessories may be available. Please call for details.



For an instructional video on how to perform an encapsulated chemical suit pressure test, go to the Lakeland web site at www.lakeland.com



Interceptor[®] Physical Properties

Physical Property	Test Method	Units	Test Results
Basis Weight	ASTM D3776	oz/y2	9
Grab Tensile MD	ASTM D5034	lbs.	216 lbs.
Grab Tensile XD	ASTM D5034	lbs.	165 lbs.
Trapezoidal Tear MD	ASTM D5733	lbs.	43.7 lbs.
Trapezoidal Tear CD	ASTM D5733	lbs.	57.9 lbs.
Ball Burst	ASTM D3787	lbs.	173 lbs.

Permeation Data for ASTM Recommended List of Chemicals for Evaluating Protective Clothing Materials (ASTM F1001)

Chemical Name	Physical Phase	Normalized Break- through Time (min.)	CAS No.
Acetone	L	>480	67-64-1
Acetonitrile	L	>480	75-05-8
Ammonia (gas)	G	>480	7664-41-7
1,3-Butadiene	G	>480	106-99-0
Carbon disulfide	L	>480	75-15-0
Chlorine gas	G	>480	7782-50-5
Dichloromethane	L	>480	75-09-2
Diethylamine	L	>480	109-89-7
N,N-Dimethylformamide	L	>480	68-12-2
Ethyl acetate	L	>480	141-78-6
Ethylene oxide	G	>480	75-21-8
n-Hexane	L	>480	110-54-3
Hydrogen chloride	G	>480	7647-01-0
Methanol	L	>480	67-56-1
Methyl chloride	G	>480	74-87-3
Nitrobenzene	L	>480	98-95-3
Sodium hydroxide, 50%	L	>480	1310-73-2
Sulfuric acid (conc.)	L	>480	7664-93-9
Tetrachloroethylene	L	>480	127-18-4
Tetrahydrofuran	L	>480	109-99-9
Toluene	L	>480	108-88-3

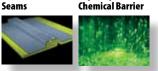
> = greater than, L = liquid, G = gas

Note: Chemical Resistance Data is in accordance with ASTM F-739 test method. Testing is performed on fabric samples only, not finished garments. Sources for all test data are independent laboratory conditions and not actual use conditions.

Permeation Data for 595 Class/Subclass Chemical Warfare Agents			
Agent	Common Name	CAS Number	Avg. Breakthrough Time
GA	Tabun	77-80-6	> 60 min.
GB	Sarin	107-44-8	> 60 min.
GD	Soman	99-64-0	> 60 min.
HD	Sulfur Mustard	505-60-2	> 60 min.
L	Lewisite	541-25-3	> 60 min.
VX	VX	50782-69-9	> 60 min.

Testing stopped at 60 minutes in accordance with NFPA 1991, 2005 requirements > = greater than, < = less than, nt = not tested

Heat Sealed Liquid Splash/ Seams Chemical Barrier



Survivair[®] pass-thru with Hanson[®] fittings Draegar pass-thru with Hanson® fittings

Draegar pass-thru with Foster® fittings

MSA Quick Fill® pass-thru North pass-thru with snap fittings

MSA Wall-thru unit

Reinforce crotch

Reinforce elbows

Add sleeve guards

Reinforce knees

Reinforce crotch and elbows

Add double storm flap with snaps

Add 2 exhaust valves with covers

Add 1 exhaust valve with cover

Invert zipper on Level A

North pass-thru with Hanson® fittings

Draegar pass-thru with Snap Tite® fittings

MSA Dual Purpose[®] pass-thru with Hanson[®] fittings

MSA Dual Purpose pass-thru with brass Foster fittings

Add double storm flap with hook and loop closure

Chemical Options and Accessories





LEVEL A/NFPA Test Kit

Maintain your encapsulated suits with this easy to use test kit. Kit features an easy-to-read Magnehelic pressure gauge, digital timer, sturdy brass and steel fittings, hoses and connectors in a waterproof case. Complete instructions included.
Part No. 00010 – Level A Test Kit
Part No. 00011 — NFPA Test Kit
Part No. 00013 — Twist Lock valve fitting
Part No. 00015 – Adaptor for test kit to test DuPont Level A Suits
Part No. 00017 – Adapters for DuPont test kit to test Lakeland suits.
Part No. 00200 – Universal test kit for DuPont, Lakeland, and Kapler Level A and NFPA Certified suits. Features an integrated blower for suit inflation.

P6

P7

P8

P9

P10

P13

P14

P17

P18

R2

R3 R4 R5

S1 S2 S3

V1

V2

71



Quick Disconnect Assembly for Gloves Option G7

Replacing the gloves on your encapsulated suit is a snap with this quick disconnect assembly. Twist off-twist on action makes for easy removal and installation. Outer replacement assemblies available.



One Glove System, Option G3

The ONEGlove® system consists of a Hazmat glove which has a Kevlar® outer glove, Nomex[®] inner glove, and a Fluoropolymer barrier film.



Hook and Loop Closure Boot Flap Option B1

Get your boots on and off easier with this hook and loop closure feature. After donning chemical boots, simply press the hook and loop closure together and you are ready to roll!

Options for Lakeland Interceptor® Level A and B Chemical Suits

Option Description

- A1 Add 1 side air tube B1
 - Add hook and loop to boot flaps
- B2 Add boot flaps Add 10 mil Teflon® faceshield F1
- Add 20 mil PVC faceshield F3
- F4 Add 40 mil PVC faceshield
- G3 Add OneGlove® system to chemical suit
- G5 Seal-tight glove system
- North Silvershield® gloves heat sealed to suit G6
- G7 Quick disconnect assembly for gloves
- Replacement quick disconnect outer glove assembly, Butyl® (per pair) G8
- G9 Replacement quick disconnect outer glove assembly, Viton® (per pair)
- GA Glove O-ring and clamp assembly
- 11 Inspect, retest and recertify Level A suit*
- 12 Install customer supplied pass-thru
- Add reflective numbers or letters to suit (4 max) each N1 P1
- Scott® pass-thru with Hanson® fittings P7 Scott [®] pass-thru (not NIOSH approved)

Accessories for Interceptor® Level A and B chemical suits

Option	Description	Cooling V	est
Gloves 00001 00020 00021	PVC glove ring 25 mil Butyl gloves Viton® gloves	00055 00056 00057 00058	Phase Change® Vest, poly cotton outershell Phase Change® Vest, Banox® (FR Cotton) outershell Set of 4 Phase Change® inserts Phase Change® Vest, Nomex® outershell
00024 00025 00027	17 mil Butyl glove North Silvershield® gloves Kevlar® knit gloves	Storage B 00750 00760	Fags Level A storage bag Lakeland Utility Bag (Small)
Boot Covers and Boots		00770	Lakeland Utility Bag (Large)
00045 00046	Onguard EZ Fit Hazmax® boots (NFPA Certified) Tingley® Hazmat Boots	Valves 00014	Exhaust Valve



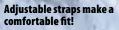
95493 (Front Entry) Encapsulated Nylon /PVC Training Suit, expanded back, sewn seams, 20 mil PVC faceshield, single storm flap, butyl gloves, 2 exhaust ports, attached sock boots. Training Use Only! Case Pack: 1

80497 (Front Entry

Encapsulated rear entry expanded back, Training suit with a 20 Mil PVC lens, 48" non separator cloth zipper that zips from BOTTOM TO TOP, zipper is reinforced at top and bottom with webbing on the outer side, double storm flap, exhaust port on back right side of hood, 1 exhaust port on left back side of body, sock boots, boot flaps sewn on, PVC gloves sewn on, Internal belt loops and assembled belt. No hem on splash guard or dump valve covers. Training Use Only! Case Pack: 1

Phase Change Cool Vest

Wear a Cool Vest underneath a chemical protective suit and stay cool!



Lakeland



Get Comfortable with a Phase Change Cool Vest° from Lakeland Industries

Working in HazMat/Protective suits can make anyone lose their cool. The Phase Change Cool Vests[®] worn under these suits give the user a greater degree of comfort. In fact, it creates a climate of 58° F. /14° C for up to three hours (depending on work environment).

How Do They Work?

These vests create a cooling energy from a unique Phase Change Material that is mechanically sealed in durable inserts. After placing the inserts in ice water or a refrigerator for just 30 minutes, the vests deliver the constant cool temperature.

Unlike frozen water or gel products, our Phase Change Material maintains a consistent temperature of 58° F. /14° C during its transition from a solid to a liquid. This ensures that the wearer receives a constant cooling temperature throughout the entire two to three hour period.

Safe and Effective

At Lakeland Industries, we are very concerned about the materials we use in our products. Our Phase Change Material is made of a proprietary blend of alkanes with unique thermal properties. The inserts are non-toxic and non-flammable and can be used over and over again. To achieve continuous cooling, additional insert sets are available so the user can rotate each set.

Comfort is Key

Designed for comfort, these vests are washable and lightweight. The built-in side and shoulder adjustments provide a better fit. To suit a variety of users, the vests come in many styles, sizes and fabrics, including polycotton and Nomex^{*}.

If you want a safe and effective way to keep your workers cool, get the Phase Change Cool Vest^{*}, available at Lakeland.

Style 00055 – Polycotton Cool Vest[®] **Case Pack**: 1 Style 00058 – Nomex[®] Cool Vest[®] **Case Pack**: 1 Style 00056 – Banox (FR Cotton) **Case Pack**: 1 Style 00057 – Set of 4 Cool Vest replacement inserts **Case Pack**: 1



911[®] Series Extrication Suits

Built to meet the rigourous demands of today's fast-paced rescue personnel.

- Quality double stitched construction that's made to last.
- Attention to the smallest detail from top to bottom.
- Loaded with features.
- From a name you can trust.
- 9.0 oz. flame resistant cotton

Lakeland's Extrication Suits manufactured with our Flame Resistant Cotton have the built in toughness that you come to expect from a leader in the flame resistant market.

From our reinforced stitching to our covered snaps, Lakeland's FR Cotton Extrication Suits have details that you won't find from the competitors. Since the material is FR Cotton, it is less costly than other fabrics, providing an affordable FR solution.

No one can predict when an emergency will occur. Be prepared for anything with inexpensive and reliable protection. Lakeland Extrication Suits made from our FR Cotton can ease your concerns about the safety of your employees without causing concerns about the cost.

Style C08616sz – FR Cotton Coverall in Red

Style C08613sz – FR Cotton Coverall in Navy

Style ECO86 – FR Cotton Coat

Style EP086 – FR Cotton Pant

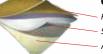


Extrication Suit Features

- Stand-up collar with hook and loop closure
- Brass zipper front with hook and loop storm flap
- Pocket on chest with utility loop
- Padded forearms
- Hook and loop take-up straps at waist
- Glove strap with clip in waistband
- Scissor pocket with strap on right semi-bellows pocket
- Padded shins
- Reflective trim
- Bi-swing back
- Mic clip above radio pocket
- Radio pocket with flap and utility strap

- Pencil pocket on left sleeve
- Padded elbows
- Lined sleeves
- Hook and loop adjustment straps at wrist
- Side entry pockets with pass-through hook and loop closures
- Two rear patch pockets with flaps
- Semi-bellows pocket with flap on each thigh
- Extra large padded knees
- 12" leg zipper with hook and loop adjustable straps at ankle
- 2 Piece Extrication Suit has additional feature of two rear pants patch pockets with flaps

OSX[®] Battalion[™] Turnout Gear



OSX™ Battalion Materials Khaki Advance® Outer shell Stedair 3000° Moisture Barrier Aralite® Thermal Liner



Need a set of quality turnout gear without the wait? Make the call for OSX®. OSX® is always in stock, on the shelf for fast delivery.

Like it's MTS[®] brother, OSX[®] Battalion[™] is Fyrepel's most popular series of turnout gear. The gear features an advanced 3 body panel design 32" coat and high-back pants designed to give the wearer extreme freedom of movement. Rugged construction means maximum durability and a long garment life. A long list of standard features rivals what other manufacturers call custom gear.

Get your gear, and get it fast with OSX[®].



Coat

- 1. 32" coat length, three body-panel design.
- 2. Double stitched major seams with 8 to 10 stitches per inch.
- 3. All hardware reinforced with die-cut leather.
- 4. Liner attaches to jacket with snaps and Velcro®
- 5. Throat tab features scooped design for a better interface with helmet, shroud and SCBA mask.
- 6. Hanger loop on rear collar.
- 7. Extra layer of thermal liner in shoulders for increased thermal protection.
- **Ergonomically correct 2-panel** curved sleeve follows arm range of movement.
- Underarm gusset allows arms to be raised with minimal coat rise.
- Deep two layer neoprene sleeve

- 11. Grey Arashield[®]cuff reinforcements are double stitched.
- 12. 4" Nomex[®] knit wristers retain their memory and shape.
- 13. Zipper/Velcro[®] closure standard.
- 14. 2" x 3.5" x 8" Radio Pocket on left chest.
- 15. Self material mic strap above radio pocket.
- 16. Flashlight snap and strap on right chest.
- 17. 2" x 8" x 8" expansion bellows pockets lined with Kevlar[®] twill. Handwarmer pockets under expansion pockets.
- 18. "Easy Grip" DRD (Drag Rescue Device) can be employed with one hand.
- 19. Double stitched NYC Style Lime/ Yellow Triple Trim.
- Jacket liner inspection port.
- 21. 7" x 9" Nomex® Liner Pocket.

Pants

- 1. 4-piece outer shell and liner system.
- 2. Double stitched major seams with 8-10 stitches per inch.
- 3. 3" rear back bib.
- 4. Velcro[®] Hook & Dee/Snap Fastener **Fly Closure**
- 5. Double layer 2" Nomex® Waistband with snaps for liner.
- 6. Nomex[®] twill take up straps
- 7. Two 10" x 10" x 2" expansion pockets lined with Kevlar® twill.
- 8. Gray Arashield[®] knee reinforcements.
- 9. Double layer padded knees.
- 10. Liner inspection opening.
- 11. Rear boot-cut cuffs.
- 12. 6-point H-back suspenders.
- 13. Die-cut leather reinforced hardware.
- 14. Double stitched Lime/Yellow triple trim.

15. Gray Arashield[®] cuff reinforcements-double stitched.

OSX® Battalion Size Range

Chest, Waist and Inseam Measurements in 2" even increments Jacket: 36"-60" Pants: 30" x 30" - 58" x 30"



To see a video on measuring for a good fit, go to the Fyrepel website: http://fyrepel.com/measure.html

OSX[®] Attack[™] Turnout Gear



OSX[™] Attack Materials - Yellow Nomex®Outer shell - Stedair 3000® Moisture Barrier - Aralite® Thermal Liner



OSX[®] Attack[™] Standard Features

OSX® Attack is always in stock, ready to ship. Loaded with a long list of popular features, OSX® Attack is sure to become one of the best sets of turnout gear you've ever owned!

The Attack™ Series is Fyrepel's traditional style of turnout gear. Attack™ features a longer 35″ coat and waist high pants. OSX® patterns have revolutionized the way Attack feels and wears. Superior mobility is key, with unrestricted movement while crouching, bending or reaching.

Go on the attack with OSX® Attack! In stock, ready to ship....





Coat

- **1.** 35" coat length, three body-panel design.
- 2. Double stitched major seams with 8 to 10 stitches per inch.
- All hardware reinforced with diecut leather.
- Liner attaches to jacket with snaps and Velcro[®]
- Throat tab features scooped design for a better interface with helmet, shroud and SCBA mask.
- 6. Hanger loop on rear collar.
- Extra layer of thermal liner in shoulders for increased thermal protection.
- Ergonomically correct 2-panel curved sleeve follows arm range of movement.
- **9.** Underarm gusset allows arms to be raised with minimal coat rise.
- **10.** Deep two layer neoprene sleeve wells.

- **11.** Grey Arashield®cuff reinforcements are double stitched.
- **12.** 4" Nomex[®] knit wristers retain their memory and shape.
- 13. Zipper/Velcro[®] closure standard.
 14. 2" x 3.5" x 8" Radio Pocket on left
- chest. 15. Self material mic strap above
- radio pocket. **16.** Flashlight snap and strap on right chest.
- **17.** 2" x 10" x 10" expansion bellows pockets lined with Kevlar[®] twill.
- **18.** "Easy Grip" DRD (Drag Rescue Device) can be employed with one hand.
- **19.** Double stitched NYC Style Lime/ Yellow Triple Trim.
- 20. Jacket liner inspection port.
- 21. 7" x 9" Nomex® Liner Pocket.

Pants

- 1. 4-piece outer shell and liner system.
- 2. Double stitched major seams with 8-10 stitches per inch.
- 3. Velcro[®] Hook & Dee/Snap Fastener Fly Closure
- Double layer 2" Nomex[®] Waistband with snaps for liner.
- 5. Nomex[®] twill take up straps
- Gray Arashield[®] knee reinforcements.
- 7. Double layer padded knees.
- 8. Liner inspection opening.
- 9. Rear boot-cut cuffs.
- 10. 8-point X-back suspenders.
- 11. Die-cut leather reinforced
- hardware. 12. Double stitched Lime/Yellow triple trim.
- Gray Arashield[®] cuff reinforcements-double stitched.

OSX® Attack Size Range

Chest, Waist and Inseam Measurements in 2" even increments

Jacket: 36" – 58" Pants: 30" x 30" – 54" x 30"



To see a video on measuring for a good fit, go to the Fyrepel website: *http://fyrepel.com/measure.html*

SmakeJumper[™] Wildland Gear

Nomex. Mitra Sal

(UL)

M Scotchlite

9 ot. Induce Ultro Soft

601.Nomet*

Off-the-Shelf Wildland Protective Clothing with Plenty of Features! Get Your Protective Gear Fast!!!

Smoke Jumper[™] Wildland Protective Clothing

Get on station fast with Smoke Jumper™ Wildland Clothing. This wildland gear comes loaded with features and is in stock, so there's no wait for delivery. It's off-the-shelf protective clothing with a load of custom built features!

Smoke Jumper™ Standard Features

Coat

1. Mic Clip.

- 2. Chest pocket.
- 3. Radio pocket.
- 4. Reflective trim on sleeves.
- 5. Velcro® take ups on sleeve cuffs.
- 6. Bellows pockets.
- 7. Reflective trim on coat bottom.

Pants

- 8. Bellows pockets and hip patch pockets.
- 9. Pass thrus.
- 10. Reflective trim on pant cuffs.

Style Numbers

BC10N26	6 oz. Nomex® Coat
BP10N26	6 oz. Nomex® Pants
BC10I26	9 oz. Indura® Ultra Soft Coat
BP10I26	9 oz. Indura® Ultra Soft Pants

FR Cotton Coveralls • HRC2

Economical FR Protection that's Made to Last!

The dangers of flash fire and/or explosion are an every day worry for industrial workers. If workers are equipped with flame-resistant protective clothing injuries can be avoided.

Lakeland's flame resistant coveralls manufactured with FR Cotton have the built in toughness that you expect from a leader in the flame resistant market. Whether you are clothing pipeline workers or linemen, these coveralls offer amazing protection and value.

From our reinforced stitching to our covered snaps, Lakeland's FR Cotton coveralls have details that you won't find from any competitor. Since the material is FR Cotton, it is less costly than other fabrics, providing an affordable solution.

No one can predict when an emergency will occur. Be prepared for anything with inexpensive and reliable protection. Lakeland coveralls made from FR Cotton can ease your concerns about the safety of your employees without causing concerns about the cost.

CO81 - 9.0 oz. per square yard FR Cotton - Navy Blue ATPV = 12.4, HRC Level = 2

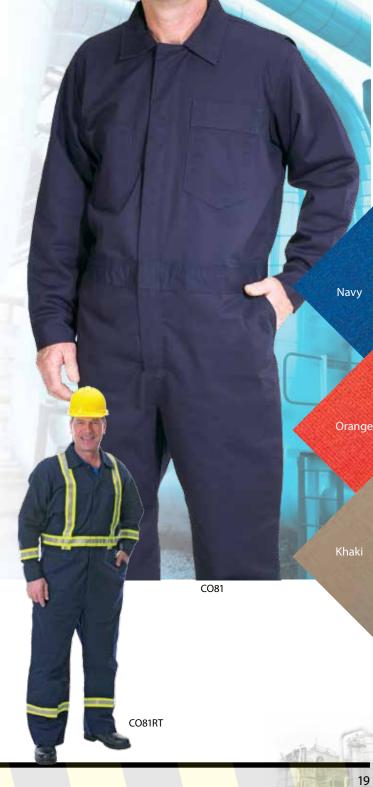
CO81RT - 9.0 oz. per square yard FR Cotton - Navy Blue, reflective trim. ATPV = 12.4, HRC Level = 2

Features:

- Two patch breast pockets, left chest pocket has safety flap
- Heavy duty, two-way quick release brass zipper
- Heavy duty snaps covered internally
- Two hip pockets with a snap closure on the left hip pocket
- Two swing pockets with internal pass-thrus
- Pleated bi-swing back with elasticized waistband
- Utility pocket on right leg
- Adjustable sleeve cuffs
- Flared leg cuffs for ease of donning and doffing
- Sewn throughout with Nomex[®] thread

Meets the performance requirements of NFPA 70E (2009 Edition) and ASTM F1506-08. Acceptable for use in occupations covered by OSHA Final Rule 1910.269

NFPA 2112 Certified



Cut Resistant Sleeves



Style	Description	Cut Level*	Sizes
Kevlar [®] Sleev	es		
41022	100% Kevlar°, 2 ply sleeve, 3″ width	2	10″
41222	100% Kevlar [°] , 2 ply sleeve, 3″ width	2	12″
41422	100% Kevlar [°] , 2 ply sleeve, 3″ width	2	14″
41622	100% Kevlar [°] , 2 ply sleeve, 3″ width	2	16″
41822	100% Kevlar [°] , 2 ply sleeve, 3″ width	2	18″
42222	100% Kevlar [°] , 2 ply sleeve, 3″ width	2	22″
42422	100% Kevlar [°] , 2 ply sleeve, 3" width	2	24″
DextraGard	Sleeves		
9410	DextraGard [°] , 5 1/4" width	5	10″
9412	DextraGard [°] , 5 1/4" width	5	12″
9414	DextraGard [°] , 5 1/4" width	5	14″
9416	DextraGard°, 5 1/4″ width	5	16″
9418	DextraGard [°] , 5 1/4" width	5	18″
Grapolator [®] S	ileeves		
93-473	Grapolator [®] sleeve, steel reinforced 4" wide	4	10″
Other sleeve wie	ths and lengths are available; call for details		

*ANSI/ISEA 105-2005 Cut Performance Ratings based on ASTM F1790-97 testing protocols

Other options are available, including thumbholes, alligator clips, Velcro[®] closures and more. Call Customer Service for all available options.

Warranty and Warnings

Warranty Information

It is the responsibility of the user to select garments or products which are appropriate for each intended use and which meet all specified government and industry standards.

IMPROPER USE OF THESE PRODUCTS MAY RESULT IN PERSONAL INJURY OR **DEATH. IMPROPER USE INCLUDES, BUT IS** NOT LIMITED TO IMPROPER SELECTION, USE WITHOUT ADEQUATE TRAINING, **DISREGARDING THESE WARNINGS AND** INSTRUCTIONS SUPPLIED WITH THE **PRODUCTS AND FAILURE TO INSPECT** AND MAINTAIN THE PRODUCTS, THESE **PRODUCTS ARE INTENDED TO BE USED ONLY IN CONJUNCTION WITH THE ENVIRONMENTAL PROTECTION AGENCY** (EPA) RULES AND REGULATIONS, (http://www.epa.gov/lawsregs/) AND THE REQUIREMENTS OF OSHA SAFETY **AND HEALTH STANDARD 29 CFR 1910 AVAILABLE FROM THE U.S. DEPARTMENT** OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, (http://www.osha.gov), AND OTHER

PERTINENT NATIONALLY RECOGNIZED STANDARDS, SUCH AS THOSE PROMULGATED BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) (www. nfpa.org), THE AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM) (www. astm.org), THE NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH) (www.cdc.gov/niosh/rpg), AND THE U.S.COAST GUARD OR DEPARTMENT OF DEFENSE. it is incumbent upon the wearer and legally required of an employer to read and understand these regulations.

THESE PRODUCTS ARE NOT FLAME RESISTANT AND SHOULD NOT BE USED AROUND HEAT, FLAME, SPARKS, OR IN POTENTIALLY FLAMMABLE OR EXPLOSIVE ENVIRONMENTS *EXCEPT* WHERE OUR GARMENTS ARE SPECIFICALLY ADVERTISED AS FIRE RESISTANT OR RETARDANT.

NO EXPRESSED OR IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY OR OTHERWISE IS MADE. Purchaser and all garment users shall promptly notify Lakeland Industries, Inc. of any claim, whether based on contract, negligence, strict liability or otherwise.

The sole and exclusive remedy of the purchaser and all end users and the limit of liability of Lakeland Industries, Inc. for any and all losses, injuries or damages shall be the refund of the purchase price or the replacement or repair of any product found to be defective within 90 days after the product is delivered. **IN NO EVENT SHALL LAKELAND INDUSTRIES, INC. BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT OR IN TORT, ARISING OUT OF ANY WARRANTIES, REPRESENTATIONS, INSTRUCTIONS, OR DEFECTS FROM ANY CAUSE IN CONNECTION WITH THE GARMENT, OR THE SALE THEREOF.**

Purchaser and all users are responsible for inspection and proper care of this product as described in any OF OUR care and use manuals and are responsible for all loss or damages from use or handling which results from conditions beyond the control of the manufacturer.

Product safety information is available upon

request. This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentations. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. It is the user's responsibility to determine the level of risk and the proper protective equipment needed for the user's particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual enduse conditions, LAKELAND INDUSTRIES, INC. MAKES NO WARRANTIES AND ASSUMES NO LIABILITY IN CONNECTION WITH ANY **USE OF THIS INFORMATION.** Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

Warnings and Limitations

Lakeland's garments and products are not suitable for use in all situations and environments with all chemical and hazardous materials. All decisions regarding the choice and usage of chemical protective clothing must be done by trained and qualified safety professionals in accordance with all OSHA and EPA Rules and regulations. Failure to follow such regulations absolves Lakeland Industries, Inc. from all liability. It is the user's responsibility to determine the level of exposure and the proper personal protective equipment needed. It is the employer's LEGAL **RESPONSIBILITY to provide PROPER protective** clothing to employees, and provide adequate care, use and maintenance of these garments as only your employer knows the conditions under which the wearer works. Lakeland has no such knowledge, so ask your employer about what is required under the law and appropriate to your specific work application.

Lakeland chemical protective ensembles that are certified to NFPA 1991 require an over-cover. The protective over-cover provides additional protection against abrasion, cut, tear or puncture, and direct flame impingement. (All NFPA compliant Interceptor[®] ensembles utilize specific, multiple glove combinations and specific boots. All components of the specified ensemble must be worn to be compliant with the requirements of this standard.)

Lakeland protective garments will burn except where our garments are specifically advertised as fire resistant. These garments should not be worn around heat, open flames, sparks or any other possible ignition source nor in potentially explosive or flammable environments.

If the Lakeland protective garment or

product is abraded, cut, torn, punctured or otherwise and in any way breached, do not use. The protective garment material has finite resistance to abrasion, cut, tear and puncture. It is the responsibility of the employer and the wearer to inspect Lakeland garments or products prior to use to insure the integrity of the products, garments and components.

If the Lakeland protective product or garment are damaged during use, retreat immediately to a safe environment, thoroughly decontaminate the garment, then dispose of it in a safe manner.

Limitations of Use

Lakeland protective garments are not intended for protection against radiological hazards.

If the danger of exposure to biological aerosols or chemical warfare chemicals exists, the use of a protective ensemble certified to the optional Chemical and Biological Terrorism requirements of NFPA 1991 (2005 Edition) or garments certified to Class 2 of NFPA 1994 should be considered. Each of these standards provides different levels of performance.

Chemical Permeation Data

Before using a protective ensemble, garments or products in a chemical situation, consult the chemical permeation data appropriate to the garment or product material. Note that seams, visors and closures will generally have lower or different permeation times than the garments' material. This information is to be used as a guide only. The permeation performance of any material depends on a number of factors including chemical concentration, temperature, time and amount of exposure. Due to the large number of variables, it is impossible for all ensemble materials to be tested against all elements, chemicals, all combinations or mixtures thereof, and all temperatures at which the element or chemical might be encountered.

Chemical permeation tests are performed under laboratory conditions -- not actual workplace conditions. They address chemical breakthrough characteristics and do not account for physical performance characteristics that affect a barrier such as abrasion, flex fatigue, puncture, tear, oxidative degradation, or degraded performance due to previous use contaminations.

No single protective material will protect against all chemicals for all situations. The best course of action is to test the primary protective garment materials against the specific chemical hazard, at the temperature and in the concentrations to be encountered. Lakeland Industries, Inc. will provide free swatches of primary garment materials for testing and can provide you with a list of testing facilities.

Never Use Pure Oxygen

The use of 100% oxygen with these garments presents serious fire safety and health hazards. Use only properly functioning breathing quality, compressed air, air line supplied breathing air, or a rebreather system. Note that some rebreather systems utilize small oxygen cylinders, but these do not create enriched oxygen atmosphere.

Wearing garments made of fire retardant cottons, aramids or modacrylics under or over Lakeland light non-woven, ChemMax® or Interceptor[®] garments will not reduce burn injury during a flash fire. Our products and garments will burn and possibly melt when exposed to flash fire; this is likely to increase burn injuries even when worn over flame resistant fabrics. This is also true of Lakeland MicroMax® NS, MicroMax® NS Cool Suit, MicroMax[®], MicroMax[®] HBF, MicroMax[®] 3P, MicroMax[®] 3P Cool Suit, SafeGard[®], SafeGard[®] Economy SMS, ZoneGard[®], Rytex[®], ChemMax[®] and Interceptor[®] line of products and other Lakeland light non-woven fabric lines. However, Pyrolon® fabrics and garments are intended to be worn over fire retardant cottons, aramids and modacrylics.

Therefore users of any of these flammable garments should not enter an environment in which the concentration of flammable gas (such as paint fumes, hydrocarbon fumes or pure oxygen) has reached a concentration which is within flammable, ignitable or explosive limits, causing a fire or flash fire.

Simply stated, if there is a flash fire, nothing will protect you from severe burns or death. Therefore, it is the user's responsibility to think before working in even a potential flammable gaseous atmosphere.

Lakeland's light non-woven fabrics, Chemax[®] and Interceptor[®] line, are not intended for fire fighting activities, nor for protection from hot liquids, steam, molten metals, welding, electrical arc or thermal radiation. **USE COMMON SENSE! DO NOT SMOKE, OR USE ELECTRICAL MACHINERY, AND INSURE USE OF PROPER BONDING AND GROUNDING**

where flammable gas, liquids or solids exist. Anti-static treatments and coatings are not adequate for all environmental conditions. Static electricity in non-humid or winter environments can cause a deadly flash fire where flammables are present in the workplace. Lakeland's garments are intended to help reduce the potential for injury, but no protective apparel alone can eliminate all risk of injury. When dealing with fire, heat, or even the potential of same, look to Lakeland's **FIRE RESISTANT/RETARDANT APPAREL LINES**.

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All of Your Safety Apparel Needs Under One Roof.























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www.lakeland.com/ca

SHIELD-APPAREL



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