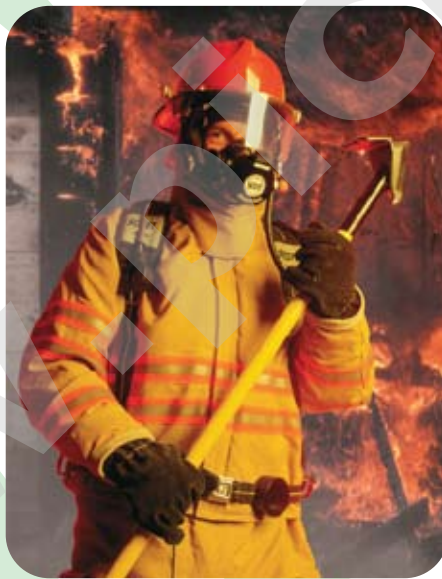


# Lakeland

**PÍCHA Safety, s.r.o.**  
eShop [www.oopp.cz](http://www.oopp.cz)  
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Lakeland Industries is one of the largest manufacturers in the world of industrial protective clothing. We make over 600,000 garments per week through a wholly owned, global manufacturing base.

Lakeland now has sales divisions in every major region in the world, with Lakeland Europe handling sales in Europe and the Middle East.

Throughout the Lakeland organisation, quality is factor number one, quality of manufacture, service and quality of product.



**... And quality is the reason users world wide increasingly turn to Lakeland as the specified choice of industrial protective clothing.**

# Lakeland Europe

LAKELAND INDUSTRIES EUROPE LTD

## Protective Clothing Standards



### Type 1 - Encapsulated suits that are fully sealed and gas-tight

EN 943-1:2002 - Protective Clothing against liquid and gaseous chemicals, including liquid aerosols and solid particles. Performance requirements for ventilated and non-ventilated suits



### Type 2 - Encapsulated suits that are not fully sealed but maintain a positive internal pressure through the use of an external air supply. EN 943-1:2002



### Type 3 - for clothing with liquid tight seams

EN 14605:2005 - Protective clothing against liquid chemicals. Performance requirements for clothing with liquid and spray tight seams



### Type 4 - for clothing with spray tight seams

EN 14605:2005 Protective clothing against liquid chemicals. Performance requirements for clothing with spray tight seams



### Type 5 - Protection against Hazardous Dust Particles

EN13982-1:2004 - Protective clothing for use against dry particulates. Performance requirements for protective clothing providing protection for the full body against airborne solid particles.



### Type 6 - protection against reduced liquid spray

EN13034:2005 - Protective clothing against liquid chemicals. Performance requirements for chemical protective clothing offering limited protective performance against liquid chemicals



### Protective Clothing against Contaminated Dusts

EN 1073-2:2002 - Protective Clothing against radiation contaminated dust particles (variation on Type 5 finished garment test)



### Protective Clothing against Infective Agents

EN 14126:2003 - Requirements against protective clothing against infective agents (biological contaminants)



### Anti-Static Protective Clothing

EN 1149-1:2004 - Requirements for protective clothing requiring anti-static properties: Surface Resistance (<math>< 2.5 \times 10^9 \text{ ohms}</math>)

## Flame and Heat Protective Clothing Standards



### Limited Flame Spread

EN 533:1997 (Indexes 1, 2 or 3)  
Flame and Heat protective clothing - limited flame spread

EN 531:1995  
Protective clothing for workers exposed to heat

EN 14116:2008  
Protective clothing -- Protection against heat and flame - Limited flame spread materials, material assemblies and clothing

## Protective Glove Standards



### Gloves - Protection against chemicals

EN 374-2 & 3:2003 - Gloves for protection against chemicals. Minimum performance of >10 mins permeation against at least 3 of 12 chemicals labeled A to L



### Gloves - Protection against mechanical risks

EN 388:2003- Gloves for protection against mechanical risks. Includes:- Abrasion Resistance (A) / Blade Cut Resistance (B) / Tear Resistance (C) / Puncture Resistance (D)

## European CE Norms



All PPE sold in Europe must carry a CE mark and meet the requirements of relevant standards. Standards relate to protection against different types of hazard.

Lakeland Europe is committed to ensuring all European sold Lakeland branded products meet the latest standards.

The key standards for chemical, flame and heat protective clothing and gloves are listed opposite alongside their relevant pictograms used on garment labels.

CE standards for Category III "Complex" products (ie, protects offering protection against hazards that may be life threatening) require full product testing and certification by an external, government certified "Notified Body".

### United States NFPA & ASTM Standards

Lakeland protective clothing manufactured for the North American market meet the requirements of the National Fire Protection Association (NFPA) and the American Society for Testing & Materials (ASTM) standards and requirements. Some items, such as our Fyrepel® and OSX™ fire fighters suits meet only North American standards (*at the time of printing*). European CE versions are in development.

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### Disposable Chemical Protective Clothing

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Be Safe. Be Sure. Wear Lakeland.



Safegard™ is Lakelands' range of fully breathable, low cost and comfortable Type 5 & 6 coveralls. Featuring multi-layer, air permeable, soft and flexible spunbonded and meltblown polypropylene, a high level of wearer comfort and cost effective pricing Safegard™ is ideal for entry level, general and especially for Type 5 hazardous dust protection applications.



## SAFEGard™ GP

Low Cost SMS coverall for Type 5 & 6 applications

<b>PROTECTION TYPES</b>				
	Type 5 Dust Protection	Type 6 Light splash Protection	EN1149 Anti-static Clothing	Nuclear Industry Dust Protection

- Breathable, comfortable, low cost protection against dusts and liquid splashes
- Available in white, blue red and orange



## SAFEGard™ 76

Premium Safegard™ product for Type 5 & 6 applications

<b>PROTECTION TYPES</b>				
	Type 5 Dust Protection	Type 6 Light splash Protection	EN1149 Anti-static Clothing	Nuclear Industry Dust Protection

- Breathable and comfortable, four layer SMMS material
- CPE bound seams for strength and protection
- Tough and durable coverall for more demanding applications
- Available in white and blue

## SAFEGard™ FR

Note about FR treated SMS/SMMS materials and the proposed Safegard FR

Lakeland have been developing an FR version of the Safegard coverall. This is normally done by adding a topical FR chemical treatment to the fabric. However, our product development process has uncovered a serious potential problem with this in that adversely affecting the repellency properties of the fabric with this treatment is unavoidable. To test this we sent several such competitors garments available in the market now for independent repellency testing according to EN368 as required by the Type 6 standard. This did indeed confirm in ALL cases that current FR / Type garments on the market DID NOT meet the minimum repellency requirements for Type 6 garments.

Our investigations lead us to believe that it is not possible with current technology on such fabrics to achieve both FR (to EN 533) AND Type 6 liquid repellency. As a result we have withdrawn from attempting to develop this product and Type 6 repellency using an SMS type fabric.

Where customers require a combined Type 6 and FR coverall we would recommend our Pyrolon XT which uses an entirely different fabric technology and does not suffer the same issue. Pyrolon XT has also been tested and approved to EN 14116:2008 – the latest FR standard which replaces the old EN 533 standards.

Contact [sales-europe@lakeland.com](mailto:sales-europe@lakeland.com) for more information

### Safegard® Features:

- Two way zip
- Lakeland "superb" pattern... inset sleeves for freedom of movement / 3-piece hood for improved fit / crotch gusset for improved fit and durability
- Good, cost-effective combination of dust and splash protection along with excellent comfort derived from fully breathable fabric

MicroMAX® uses high quality microporous polyethylene film laminate, the industry accepted alternative to more traditional disposable coveralls. With a choice of the NS (No Scrim) version or the superior Scrim-supported material, in which a nylon scrim is laminated between the layers to give MicroMAX® the strongest tear strength in its class, (see page 17) Lakeland again offers users both a budget and premium options for the tougher, more demanding applications. MicroMAX® TS offers sealed, taped seams for superior Type 4 and biological protection, whilst the hybrid Cool Suit (see page 5) offers the protection of MicroMAX® with the breathability of Safegard™... the Best of Both Worlds...



## MicroMAX NS

Superior Microporous film laminate coverall for for Type 5 & 6 applications

PROTECTION TYPES					
	Type 5 Dust Protection	Type 6 Light splash Protection	EN1149 Anti-static Clothing	Nuclear Industry Dust Protection	
	<ul style="list-style-type: none"> <li>Two way stretch film offers improved strength over standard microporous films</li> <li>Excellent liquid and dust barrier</li> <li>Available in white and green</li> </ul>				
	<p>MicroMAX® NS also available in green</p>				



## MicroMAX

MicroMAX® fabric with nylon scrim and bound seams for toughness

PROTECTION TYPES				
	Type 5 Dust Protection	Type 6 Light splash Protection	EN1149 Anti-static Clothing	Nuclear Industry Dust Protection
	<ul style="list-style-type: none"> <li>Nylon scrim between the fabric layers provides the highest tear strength in its class (see page 17)</li> <li>CPE bound seams offers superior strength and repellency at seams</li> <li>Tough and durable coverall... for more demanding Type 5 &amp; 6 applications</li> <li>Available in white</li> </ul>			



## MicroMAX TS

MicroMAX® NS coverall with fully sealed seams for Type 4 protection

PROTECTION TYPES						
	Type 4 Liquid splash Protection	Type 5 Dust Protection	Type 6 Light splash Protection	Protection Against Infective Agents	EN1149 Anti-static Clothing	Nuclear Industry Dust Protection
	<ul style="list-style-type: none"> <li>Barrier film taped seams providing fully sealed seams for Type 4 and biological protection</li> <li>Fabric passes all tests in EN14126 (bio protection) in the highest class</li> <li>* Seams permeation tested as required by latest Type 3/4 standard</li> <li>Available in white</li> </ul>					
	<p>Biological Protection: MicroMAX passes all five tests required by EN14126 for protection against biological contaminants in the highest class. However, this standard fails to specify seam requirements: for obvious reasons Lakeland have elected to certify ONLY MicroMAX TS with fully sealed, taped seams (see page 17).</p>					

### MicroMAX® Features:

- Two way zip
- Lakeland "superb" pattern... inset sleeves for freedom of movement / 3-piece hood for improved fit / crotch gusset for improved fit and durability
- High quality two-way stretch film with range of product offering excellent choice of protection combined with good levels of comfort



MicroMAX® NS Cool Suit offers an ideal alternative where effective protection AND effective comfort are required. By combining MicroMAX® NS and Safeguard™ 76 fabrics a coverall offering both protection and comfort is provided.



### The Problem?

Coveralls made from Microporous Film offer excellent protection but low breathability, so are not ideal to wear in warmer environments.

On the other hand breathable SMS type fabrics can only offer limited protection against liquid splashes and sprays and so are not suitable for some applications. Users therefore must choose between protection or comfort...

### The Solution?

MicroMAX® NS Cool Suit is constructed primarily from MicroMAX® NS material providing excellent protection to the front, legs, arms and head.

The blue back panel however makes use of the four layer Safeguard® 76 SMMS fabric to provide a large area, (3250cm<sup>2</sup>) which is fully breathable and providing the comfort needed in many modern industrial applications.

### Superior Seams

MicroMAX® NS Cool Suit is also constructed with superior CPE blue bound seams to improve seam repellency and strength



### PROTECTION TYPES



Type 5  
Dust  
Protection



Type 6  
Light  
Splash  
Protection



EN1149  
Anti-  
Static  
Clothing



Nuclear  
Industry  
Dust  
Protection

**IF YOU CANT STAND THE HEAT ...**

**... YOU NEED A COOL SUIT**

For Type 3 & 4 chemical splash and spray protection two elements are critical: the barrier against chemicals; and the seam and zip protection. Unlike competitors ChemMAX® offers a range of four fabrics, each offering an effective barrier against a variety of chemicals. This means customers can select the optimum combination of a fabric that protects against the chemicals required, whilst also selecting the most economical. Seams are all fully stitched and taped with a chemical barrier film tape, and front fastenings feature a double zip and re-sealable storm flap, ChemMAX® offers a wider choice of protection and cost for Type 3 & 4 protection.



### Lightweight and flexible cost effective Type 3 & 4 protection

**PROTECTION TYPES**



Type 3  
Liquid tight  
Protection



Type 4  
Spray tight  
Protection



Nuclear  
Industry Dust  
Protection



EN1149  
Anti-static  
Clothing



Protection  
against  
Infective Agents

- Cost effective, lightweight chemical protective coverall
- Fully taped and sealed seams
- Double zip and storm flap front fastening
- Cushioned knee pads for comfort and protection
- Available in yellow

ChemMAX® garments feature unique cushioned kneepads for added protection and comfort.



### Mid range coverall with proven chemical barrier and very soft fabric

**PROTECTION TYPES**



Type 3  
Liquid tight  
Protection



Type 4  
Spray tight  
Protection



Nuclear  
Industry Dust  
Protection

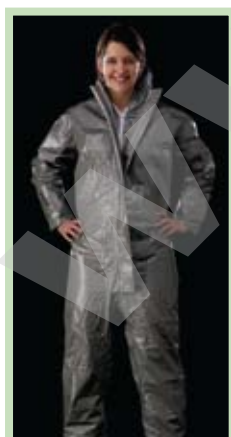


EN1149  
Anti-static  
Clothing



Protection  
Against  
Infective Agents

- Saranex 23P film laminate with good barrier against a broad range of chemicals
- Extremely soft and flexible fabric for excellent comfort properties
- Fully taped and sealed seams
- Double zip and storm flap front fastening
- Cushioned knee pads for comfort and protection
- Available in white



### Multi-layer composite fabric with EVOH film offers high chemical barrier

**PROTECTION TYPES**



Type 3  
Liquid tight  
Protection



Type 4  
Spray tight  
Protection



Nuclear  
Industry Dust  
Protection



EN1149  
Anti-static  
Clothing



Protection  
Against  
Infective Agents

- High barrier against a wide range of chemicals
- Good fabric softness and flexibility
- Fully taped and sealed seams
- Double zip and storm flap front fastening
- Cushioned knee pads for comfort and protection
- Fabric tested against a range of chemical warfare agents, including mustard, Soman and Sarin
- Available in grey

#### ChemMAX® Features:

- Choice of fabrics to offer required chemical barrier for application
- Double zip and storm flap, fully sealed seams, cushioned knee-caps
- Lakeland "superb" pattern... Inset sleeves for freedom of movement / 3-piece hood for improved fit / crotch gusset for improved fit and durability
- **A range of highly effective chemical protection combined with soft, flexible fabrics and sealed seams.**

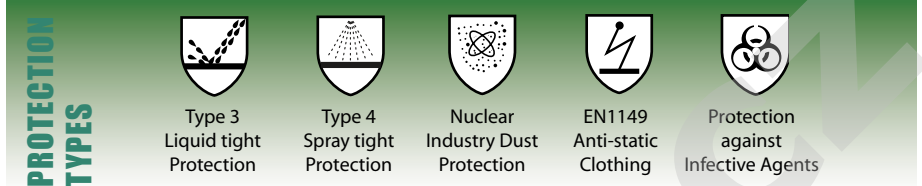
Download latest chemical permeation information or use chemical search database at [www.lakeland.com](http://www.lakeland.com) or see page 18 for a comprehensive chemical listing with permeation data.

ChemMAX® Upgrades offer more comprehensive protection including various additional features and the options of fully encapsulating suits with visors and attached feet and gloves. Upgrade patterns can also be made in any other fabrics.



## 3 PLUS

ChemMAX™ 3 coverall with additional protective features



- ChemMAX™ 3 coverall with attached boots with boot overflaps and double cuffs
- Double zip and storm flap front fastening
- Available in grey

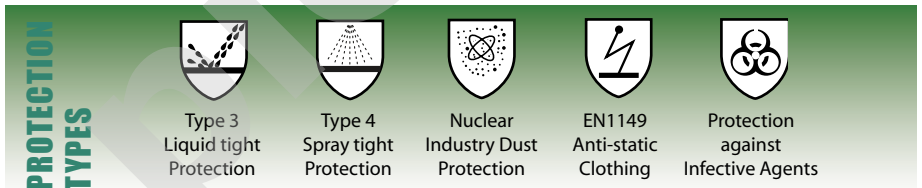
ChemMAX™ 3 fabric is tested against a range of chemical warfare agents. Contact Lakeland Europe for a copy of our document "ChemMAX™ 3 for use in NBC Applications".



## 3 ECP

flat or expanded  
back options

Fully encapsulating ChemMAX™ 3 coverall in flat and expanded back versions



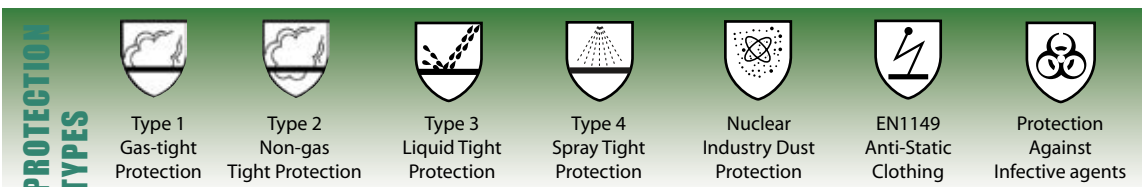
- Fully encapsulating coverall with PVC visor and sealed exhaust valves
- Flat back version with hose inlet and ties for use with portable respirator unit
- Expanded back version for use with SCBA and sealed exhaust valves
- Available in grey

Other options.

- Attached chemical gloves using "ring" system
- Bespoke elements

## ChemMAX 4

ChemMAX™ 4 is a new forthcoming product offering an even higher and more effective barrier than ChemMAX™ 3



- High barrier against a wide range of chemicals
- Good fabric softness and flexibility
- Fully taped and sealed seams
- Double zip and storm flap front fastening
- Cushioned knee pads for comfort and protection
- Available in Type3 & 4 coverall and fully encapsulating Types 1 & 2 versions
- Available in forest green and yellow

Available Soon



Tomtex™ is an extremely lightweight and flexible alternative for Type 3 and 4 applications where general chemical protection is required. Especially suitable for tank cleaning and agricultural spray and dipping applications



## TOMTEX™

Lightweight, low cost coverall for Type 3 & 4 applications

PROTECTION  
TYPES



Type 3  
Liquid Tight  
Protection



Type 4  
Spray Tight  
Protection



Nuclear  
Industry Dust  
Protection



EN1149  
Anti-Static  
Clothing

- Lightweight and flexible chemical barrier fabric
- Low cost Type 3 & 4 protection
- Double zip & storm flap front fastening
- Fully taped and sealed seams
- Available in pale green colour - ideal for agricultural applications and public areas.

Interceptor™ is Lakeland's new high barrier fully encapsulating chemical suit. Fabric consists of two proprietary barrier films separated by a layer of needlepunched nonwoven to provide an extremely high barrier in a relatively light and flexible fabric. Available in 2010.



## INTERCEPTOR™

PROTECTION  
TYPES



Type 1  
Gas-tight  
Protection



Type 2  
Non-gas  
Tight Protection



Type 3  
Liquid tight  
Protection



Type 4  
Spray Tight  
Protection



Nuclear  
Industry Dust  
Protection



EN1149  
Anti-Static  
Clothing



Protection  
Against  
Infective Agents

- High barrier against a wide range of chemicals
- Good fabric softness and flexibility
- Fully taped and sealed seams
- Fully encapsulating Type 1 & 2 suit with visor and Lakeland designed superior enhancements
- Available in forest blue and dark grey

**Interceptor™** • High chemical barrier flexible fabric  
**Features:** • Fully encapsulating suits with PVC visor, exhaust valves, inlet hose connections or expanded back where appropriate  
• Choice of colours

Unlike other FR disposable garments, Pyrolon® uses unique intrinsically FR materials to produce garments that combine chemical protection to Type 5 & 6 (Pyrolon® XT) and Types 3 & 4 (Pyrolon® CRFR) with flame retardancy to the latest FR standard EN14116:2008. These garments are used extensively in the European petrochemical industry where they are safer in any area where contact with flame is a risk, but most importantly, unlike standard disposables, can be worn over Thermal Protective Garment (such as Fyrban FRC or CMA) without compromising flame and heat protection.



## Pyrolon® XT

Viscose rayon / polyester-based nonwoven fabric with offering splash and dust protection with Flame Retardancy

PROTECTION TYPES					
	Type 5 Dust Protection	Type 6 Light Splash Protection	EN1149 Anti-Static Clothing	Nuclear Industry Dust Protection	EN 533:1993 : Index 1 EN 14116:2008

- Soft & breathable fabric
- Reinforcing nylon scrim to inside for additional strength
- Unique fabric combines light splash protection, dust protection and flame retardancy
- Fabric will not ignite even in forced ignition situations
- Can be worn over standard flame protective workwear without compromising flame protection - in most cases flame protection is improved. Tested in multilayer ensembles for predicted body burn using Thermal mannequin test equipment to prove an increase in thermal protection and a reduced body burn incidence ... see detailed Pyrolon® leaflet for further information
- Meets latest FR standard EN 14116:2008



## Pyrolon® crfr

Viscose rayon / polyester / PVC film composite fabric provides a chemical protective suit that will not burn... even in a forced ignition situation

PROTECTION TYPES					
	Type 3 Liquid Tight Protection	Type 4 Spray Tight Protection	Nuclear Industry Dust Protection	EN1149 Anti-Static Clothing	EN 533:1993 : Index 1 EN 14116:2008

- Soft & flexible fabric
- Ideal alternative to standard disposable chemical suits in fire risk areas such as petrochemical and refining plants
- Combines Type 3 & 4 chemical spray protection and flame retardancy
- Fabric will not ignite even in forced ignition situations
- Can be worn over standard flame protective workwear without compromising flame protection - in most cases flame and heat protection is improved. Tested in multilayer ensembles for predicted body burn using Thermal mannequin test equipment to prove an increase in thermal protection and a reduced body burn incidence ... see detailed Pyrolon® leaflet for further information
- Meets latest FR standard EN14116:2008
- Fully stitched and taped seams for impervious seal

### Pyrolon® Features:

- Combined dust & chemical protection with flame retardancy.
- Unlike standard disposables fabric will not ignite even in a forced ignition situation.
- Ideal and safer alternative in areas with risk of contact with flame.
- Can be worn over standard FR workwear without compromising flame protection... In fact flame and heat protection are improved and predicted body burn injury from flash fire is reduced.

Fyrban is our range of woven reusable flame and heat protective workwear using Lakeland-sourced materials. FRC uses a high quality Flame Retardent cotton, whilst CMA uses a Certified Meta Aramid for superior protection. Garments can also be manufactured from a variety of customer specified fabrics and in a choice of styles and colours.



## Fyrban FRC

PROTECTIVE APPAREL  
Mfg. by Lakeland Industries

330gsm, 100% Flame retardent cotton overall / Bib & Brace with Jacket

### PROTECTION TYPES



EN ISO 11611:2007 - A1/A2 Pass  
EN ISO 11612 : 2008 - A1/A2/B1/ C1

- Overall with collar and quick release pop stud front fastening
- Two chest pockets, two slit entry hip pockets, two rear pockets and one tool pocket
- Adjustable pos-stud wrist fastening
- Full size range S - XXXL
- Also available in Bib & Brace and jacket set

#### Other fabrics & designs available

Fyrban FRC and CMA are made from Lakeland proprietary fabrics to standard design coveralls, jackets, trousers and bib & brace. Garments can also be made to customers own specifications with optional design elements and a full range of colours to order. In addition, Lakeland can manufacture FR coveralls using available branded fabrics such as Nomex® and Indura®.

#### Arc Protective Clothing

Lakeland also make specialist flame retardant coveralls and clothing for arc protection including HRC levels 1 to 4.



## Fyrban CMA

PROTECTIVE APPAREL  
Mfg. by Lakeland Industries

200gsm, Certified Meta-Aramid ( 5% aramid / 3% Kevlar® / 2% carbon fibre)

### PROTECTION TYPES



EN ISO 11611:2007 - A1/A2 Pass  
EN ISO 11612 : 2008 - A1/A2/B1/ C1

- Overall with collar with brass zip front fastening and elastic waist
- Two chest pockets, two hip pockets, two rear pockets and one tool pocket
- Adjustable pop-stud wrist fastening
- Full size range S - XXXL
- Also available in Bib & Brace and jacket set
- Range of colours available to order

#### Fyrban Features:

- Choice of fabrics: Flame Retardent cotton or Certified Meta-Aramid
- Choice of overall designs
- Tested & approved to latest FR standards
- Also available in other styles to order including bib & brace with jacket. FR coveralls for Thermal Arc protection also available. Contact Lakeland for more information

Lakeland Firefighters clothing is manufactured to meet the high specifications required by this demanding industry worldwide. OSX is an off-the-shelf system made to a high standard specification for those times when you need quality protection in a hurry. OSX 1000 & 2000 are held on stock in Lakeland's warehousing facilities for rapid despatch world-wide. Fyrepel is a range of bespoke turnout gear based on the standard Attack and Battalion designs and available with a range of fabric options for outer shell, thermal barrier and moisture liner and with various design options. Combat and Combat Lite are the aluminized proximity versions, and wildland versions, along with specialist Arc Protection HRC rated clothing is also available.

All Lakeland fire-fighters clothing features the concealed Drag Rescue Device (DRG), easily accessed for emergency rescue operations. A full range of accessories including boots, helmets, gloves suspenders and other items are also available.



## OSX™ 1000 When speed counts ...

### OSX™ 1000 - Main Features

Outer Shell : Yellow Nomex®  
Thermal Liner: Aralite®  
Moisture Barrier: Stedair® 3000

- 35" coat length
- Snap / velcro removable liner system
- Drag Rescue device
- NFPA compliant hi-vis reflective trim
- Reinforced shoulders & yoke
- Double stitched Nomex® thread seams
- Two 10" x 10" pockets with velcro closures and drain holes
- Radio pocket with drain holes
- Double layer tapered fly with hook & dee & snap and velcro closure
- Two 7" x 8" seat pockets to pants with velcro closures and drain holes
- Padded shoulders
- Waist back pants



## OSX™ 2000 When speed counts ...

### OSX™ 2000 - Main Features

Outer Shell: Khaki or black Advance®  
Thermal Liner: Aralite®  
Moisture Barrier: Stedair® 3000

- 32" coat length
- Snap / velcro removable liner system
- Drag Rescue device
- NFPA compliant hi-vis reflective trim
- Reinforced shoulders & yoke
- Double stitched Nomex® thread seams
- Two 10" x 10" pockets with velcro closures and drain holes
- Radio pocket with drain holes
- Double layer tapered fly with hook & dee & snap and velcro closure
- Two 7" x 8" cargo pockets to pants with velcro closures and drain holes
- Padded shoulders
- High back pants



All OSX and Fyrepel feature Lakeland Drag Rescue Device

OSX™ and Fyrepel® do not currently meet European standards but fully meet or exceed the requirements of NFPA 1971 current edition  
CE versions of OSX 1000 and 2000 are in development

Lakeland's Fyrepel® MTS series of turnout gear offers a range of dependable protection that is custom made to meet your specific needs based on your own specifications and requirements.



## Battalion



Battalion design features 32" coat, high back bib pants and choice of fabrics and options

## Attack



Attack design features 35" coat, waist high pants and choice of fabrics and options

## Combat



35" coat with waist high pants, choice of options and aluminised outer shell.

## Combat Lite



29" coat with full bib pants, choice of options and aluminised outer shell

### Attack & Battalion Fabric Options

Outer Shell	Nomex® Advance® Advance® Ultra Basofil / Kevlar® PBI Matrix® Millenia®
Moisture Barrier	Stedair® 3000 Stedair® 4000
Thermal Liner	Q-8® Aralite® Caldura® NP Caldura® SL2 Omni Synergy®

### Combat & Combat Lite Fabric Options

Outer Shell	Aluminised Nomex® Aluminised PBI Kevlar®
Moisture Barrier	Stedair® 3000 Stedair® 4000
Thermal Liner	Q-8® Aralite® Caldura® NP Caldura® SL2 Omni Synergy®

## Full range of Accessories



OSX™ and Fyrepel® do not currently meet European standards but fully meet or exceed the requirements of NFPA 1971 current edition

Lakeland's range of chemical and mechanical protective gloves, along with specialist knitted cut protective gloves using unique combinations of fibres, are manufactured to the same the high quality standards expected by worldwide users of Lakeland coveralls.



## Nitrosol

Premium Quality 100% Nitrile Glove

PROTECTION  
TYPES



EN388:2003  
Mechanical Protection



EN373 Pt2&3: 2003  
Chemical Protection

For more information on mechanical and chemical levels see individual glove brochure

Style	Description	Length	Sizes
EN10	10 mil, unlined	33cm	7-11
EN15	15 mil, unlined	33cm	7-11
EN22	22 mil, unlined	38cm	7-11
EN15F	15 mil, flocklined	33cm	7-11



## Natrosol

Premium Quality 100% Natural Rubber Glove

PROTECTION  
TYPES



EN388:2003  
Mechanical Protection



EN373 Pt2&3: 2003  
Chemical Protection

For more information on mechanical and chemical levels see individual glove brochure

Style	Description	Length	Sizes
ER15	15 mil, unlined	33cm	7-11
ER15F	15 mil, flocked	38cm	7-11



## Neosol

Premium Quality 100% Neoprene Glove

PROTECTION  
TYPES



EN388:2003  
Mechanical Protection



EN373 Pt2&3: 2003  
Chemical Protection

For more information on mechanical and chemical levels see individual glove brochure

Style	Description	Length	Sizes
EC18	18 mil, unlined	33cm	7-11
EC27F	15 mil, flocked	33cm	7-11



## Neolasol

Premium Quality neoprene / Natural Rubber double-dip glove

PROTECTION  
TYPES



EN388:2003  
Mechanical Protection



EN373 Pt2&3: 2003  
Chemical Protection

For more information on mechanical and chemical levels see individual glove brochure

Style	Description	Length	Sizes
ECR27F	27 mil, unlined	33cm	7-11



## Nitrogard

Premium Quality Nitrile Coated Glove

PROTECTION  
TYPES



EN388:2003  
Mechanical Protection

For more information  
on mechanical and  
chemical levels see  
individual glove  
brochure

Style	Description	Sizes
EN201	Knitwrist cuff - palm dipped	7-11
EN202	Knitwrist cuff - fully dipped	7-11
EN301	Safety cuff - palm dipped	7-11
EN302	Safety cuff - fully dipped	7-11



## Nitrogard Lite

Premium Quality light-weight Nitrile Coated Glove

PROTECTION  
TYPES



EN388:2003  
Mechanical Protection

For more information  
on mechanical and  
chemical levels see  
individual glove  
brochure

Style	Description	Sizes
EN101	Knitwrist cuff - palm dipped	7-11
EN102	Knitwrist cuff - fully dipped	7-11



Spectra® / Nylon - D6F9L



Spectra® / cotton - D6F7L

## Despro

Features unique two yarn knit system to maximise protection and minimise price

PROTECTION  
TYPES



EN388:2003  
Mechanical Protection



Kevlar® / Nylon - D6F8L



Spectra® / cotton - D6F5L

Lakeland Despro glove use a unique, patented system of knitting gloves using a combination of two different yarns in different areas of the glove as shown in the pictures. This means the improved levels of cut protection can be focused in a particular area of the glove - such as in this case the thumb and forefinger.

Other, bespoke designs are available on request

## Disposable Gloves



Disposable Latex Glove  
Pale yellow colour  
Lightly powdered or powder free  
50 pairs per box



Disposable Nitrile Glove  
Blue colour  
Lightly powdered or powder free  
50 pairs per box



Disposable Vinyl Glove  
White colour  
Lightly powdered or powder free  
50 pairs per box

Any style... any fabric... all of the accessories here - along with any bespoke designs or specific requirements - can be manufactured in any of the Lakeland fabrics, including:- Safeguard® 76 Blue and white, MicroMAX®, MicroMAX® NS, TomteX®, ChemMAX® 1, 2 and 3, Pyrolon® XT and Pyrolon® CRFR

## MicroMAX® NS



**MicroMax® NS Non-slip Overshoes**  
MicroMax® NS overshoes feature a unique textured PVC non-slip sole for superior sure-footing.  
Available in two sizes:  
L - length 31cm and XL - length 41cm  
  
NEW: Anti-static Version  
New for 2010 is an anti-static version of the non-slip overshoe - in which both the shoe cover and non-slip sole meet the requirements of EN1149 Surface Resistivity.



**MicroMax® NS Hoods**  
MicroMax® NS hoods feature an elasticated face opening suitable for open face or for fitting around a mask.  
Standard cape length is 49cm  
Longer lengths are available to order.



**MicroMax® NS Overboots**  
MicroMax® NS overboots feature the Lakeland non-slip sole and have a standard length of 55.6cm with an elasticated top.  
In addition, boots are secured with two MicroMax® ankle and leg ties. Available in two sizes; L and XL



**MicroMax® NS Sleeves**  
MicroMax® NS Sleeves are tapered for an improved fit and feature elasticated ends.  
Sleeves come in two standard lengths:  
Code EMN024MED - 45cm  
Code EMN024 - 50cm



**MicroMax® NS Lab / Shop Coats**  
MicroMax® NS Lab coats are available with zip or four studs with two waist pockets as standard. Lab coat length is 97.2cm as standard. Longer or shorter lengths available as specials.

## ChemMAX

All three ChemMAX® chemical barrier fabrics can be supplied in the following accessories:

- sleeves
- overshoes and overboots (featuring the Lakeland textured PVC non-slip sole)
- air fed cape hood

The ChemMAX® cape hood features an interior headmount with adjustable strap and rear mounted airhose attachment.



## Pyrolon

A range of accessories is available in the Pyrolon® XT and CRFR fabrics - combining flame retardency and liquid protection.



The Pyrolon® XT gown features a high neck, elasticated sleeves, waist ties and an open back for superior comfort.

## TOMTEX



TomteX® overboots with non-slip sole are available from stock.

Overshoes and boots made in chemical barrier fabrics such as ChemMAX® and TomteX® are constructed with a layer of the fabric inside the sole and the sole is sealed to the shoe with tape to ensure consistent chemical barrier and maintain a seal against penetration.



Lakeland also offers a range of special variants of standard products and assembled kits for specialist applications. Kits can be made to customers specifications, and a Lakeland stocking service is available even on own label and bespoke items.

## SOCO Kit



Single bagged kit for Scene-Of-Crime Operations. Featuring:-

- MicroMAX® Cool Suit - comfortable film based coverall with breathable back and blue bound seams to minimise operator contamination risk (see page 5)
- Non slip MicroMAX® overshoes
- P3 disposable face mask
- Pair of disposable nitrile gloves



SOCO kits featuring your own specified requirements and contents can be assembled to order.

Kits can be sterilised if required.



## Sterilised Garments



Lakeland disposable garments and accessories can be supplied sterilised using an Ethylene Oxide process. Certification of process is available for each sterilised batch.

Sterilised kits featuring a choice of garment and accessories can be assembled to order.

Garments can also be cleaned to remove any latent dust particles for clean room use.



## Own Label Service



Lakeland offers a bespoke own labelling service for distributors. Distributors can purchase Lakeland disposable protective clothing manufactured under their own specified labels including garment and CE labelling, packaging and CE certification\*.

Please contact us for more information

- \* Minimum quantities apply
- \* Not applicable to all Lakeland garments

## Cool Vest



The Lakeland Cool Vest uses a unique phase change material to keep the wearer cool and comfortable for up to 3 hours.

Available in standard and FR materials.

One size fits all - fully adjustable.

## Disposable Protective Clothing : Physical Properties \*

Standard & description	Safeguard		MicroMAX				Type 3 & 4				Type 1 & 2		Pyrolon	
	GP	76	MicroMAX	NS	TS	Cool Suit **	TomTex	ChemMAX 1	ChemMAX 2	ChemMAX 3	ChemMAX 4 *	Interceptor *	XT	CRFR
EN530-Abrasion	1	1	2	1	1	1	2	2	6	2	TBA	TBA	2	6
EN863-Puncture	1	1	1	1	1	1	1	2	2	2	TBA	TBA	2	2
ISO2960-Burst	-	-	3	1	1	1	3	1	2	2	TBA	TBA	2	2
ISO7854-Flex cracking	6	6	5	4	4	4	3	1	6	4	TBA	TBA	6	5
ISO9073-Trap Tear														
Md/Cd	3/2	3/2	4/3	3/1	3/1	3/1	3/3	3/3	6/4	4/3	TBA	TBA	4/3	2/2
EN5082-Seam Strength	3	3	3	3	3	3	3	3	4	4	TBA	TBA	3	4
EN1149.1 Surface Resistance	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	TBA	TBA	Pass	Pass

\* According to European Classes - EN 14324

\*\* Main body fabric - the breathable panel according to Safeguard 76

## Disposable Protective Clothing : Finished Garment Tests

Standard & description	Safeguard		MicroMAX				Type 3 & 4				Type 1 & 2		FR Protection	
	GP	76	MicroMAX	NS	Cool Suit	TS	TomTex	ChemMAX 1	ChemMAX 2	ChemMAX 3	ChemMAX 4 *	Interceptor *	XT	CRFR
EN13034:2005 Type 6	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
EN13982-1:2004 Type 5	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
EN14605:2005 Type 4	-	-	-	-	-	PASS	PASS	PASS	PASS	PASS	PASS	PASS	-	PASS
EN14605:2005 Type 3	-	-	-	-	-	-	PASS	PASS	PASS	PASS	PASS	PASS	-	PASS
EN943-1:2002 Type 2	-	-	-	-	-	-	-	-	-	-	PASS	PASS	-	-
EN943-1:2002 Type 1	-	-	-	-	-	-	-	-	-	-	PASS	PASS	-	-
EN14126:2003 Bio Protection **	-	-	PASS	PASS	PASS	PASS	-	PASS	PASS	PASS	PASS	PASS	-	-
EN1073:2002 Radioactive Contaminants	PASS	PASS	PASS	PASS	PASS	PASS	-	PASS	PASS	PASS	PASS	PASS	-	-
EN533:1997 Limited Flame Spread	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EN14116:2008 Heat/Flame protection	-	-	-	-	-	-	-	-	-	-	-	-	PASS	PASS

\* Chemmax 4 and Interceptor in development: figures represent expected results

\*\* Fabric only has passed EN 14126 tests as we do not consider it prudent to certify a stitched seam garment for biological contaminant protection.

- Cool Suit: main body fabric only passes tests.

## Chemical Penetration / Repellency for Type 6 Garments According to EN368

	Safeguard GP	Safeguard 76	MicroMAX	MicroMAX NS / TS
<b>CHEMICAL</b>	<b>REPELLENCY % / PENETRATION %</b>			
Sulphuric Acid 30%	97.4 / 0.7	97.7 / 0	98.1 / 0	97.7 / 0
Sodium Hydroxide 10%	96.5 / 0.3	99.1 / 0	98.5 / 0	99.1 / 0
O Xylene	-	-	91 / 0	91 / 0
Butan-1-ol	-	-	93 / 0	83 / 0

## Seam Types

Three types of seams are used in Lakeland garments:-



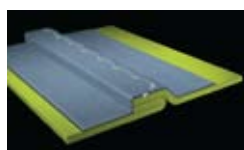
### Stitched Seam

The two pieces of fabric are brought together and stitched along. The seam can be either in the inside or outside of the garment; generally seams on the outside are considered to feature better particle filtration



### Bound Seam

A strip of material - in Lakeland garments a CPE - is wrapped and stitched along the seam. This produces a neater, tougher seam with improved repellency and filtration but remains a stitched seam and is therefore not impervious



### Stitched & Taped seam

A barrier film tape is welded into place over the stitched seams. This forms an impervious liquid-proof seam. Required for Type 3 and 4 garments in which the seam as well as the fabric should undergo permeation testing

## MicroMAX® - To scrim or not to scrim, that is the question

MicroMAX® and MicroMAX® are made using a high quality Microporous PE film laminate - a standard fabric type for Type 6 and 6 applications. However, standard fabrics of this type tend to suffer from a large difference in trapezoidal tear strength in the machine and cross direction resulting in an inherent fabric weakness - the strength in one direction is often double the other.

- MicroMAX® NS (ie, no scrim) is better than many because of being a high quality two-way stretched film.
- MicroMAX® features a unique nylon scrim laminated between the layers - both increasing and equalizing the tear strength... And making MicroMAX® one of the toughest garments of its class.

IMAGE TO COME

IMAGE TO COME

Trap Tear	Product A	Product B	Product C	MicroMAX® NS	MicroMAX
MD	26.1	42	38	58.5	47.8
CD	30.6	26	27	31.5	55
Average	28.35	34	32.5	45	51.4

Garment Seam Types	Safeguard GP	Safeguard 76	MicroMAX NS	MicroMAX	MicroMAX Cool Suit	MicroMAX TS	Tomtex	ChemMAX 1,2,3& 4	Interceptor
	Stitched	X		X					
Bound		X		X	X	X			
Taped						X	X	X	X

Below is an alphabetical list of 96 chemicals tested against the various Lakeland Type 3 & 4 coverall fabrics according to EN369 / EN374-3.

Chemical	CAS NO	T	C1	C2	C3
Acetic Acid	64-19-7	Red	White	Green	Green
Acetic Anhydride	108-24-7	White	White	Green	Green
Acetone	67-64-1	White	Black	Green	Green
Acetonitrile	75-05-8	White	Green	Green	Green
Acrolein	107-02-08	White	White	Red	Green
Acrylic Acid	79-10-7	Black	Blue	Green	Green
Acrylonitrile	107-13-1	White	White	Green	Green
Allyl Alcohol	107-18-6	White	White	White	Green
Ammonia Gas	7664-41-7	White	Black	Red	Green
Amyle Acetate	628-63-7	White	White	Green	Green
Aniline	62-53-3	White	White	Green	Green
Benzene	71-43-2	White	White	Black	Green
Benzyl Alcohol	100-51-6	White	White	Green	White
Bromine	7726-95-6	White	White	Black	Black
n-Butanol	71-36-3	White	White	Green	White
n-Butyl Ether	142-96-1	White	White	Green	Green
Butraldehyde	123-72-8	White	White	Green	White
1,3-Butadiene	106-99-0	White	Black	Green	Green
Carbon Disulfide	75-15-0	White	Green	Black	Green
Carbon Monoxide	630-08-0	White	White	Green	Purple
Chlorine Gas	7782-50-5	White	Green	Green	Green
2-Chloroethanol	107-07-3	White	Green	Green	White
Chloroacetone	78-95-5	White	White	Green	Green
Chlorobenzene	108-90-7	White	Black	Green	Green
Chlorosulfuric Acid	7790-94-5	White	White	Green	Green
Crotonaldehyde	123-73-9	White	White	Green	Green
Cyclohexane	110-82-7	White	White	White	Green
Cyclohexanone	108-94-1	White	White	Yellow	White
Cyclohexyl Isocyanate	3173-53-3	White	Black	Black	Green
1,2-Dichloroethane	107-06-2	White	White	Green	Green
Dichloromethane	75-09-2	White	Black	Green	Green
1,2-Dichloropropane	78-87-5	White	White	Green	White
Diesel Fuel	68334-30-5	White	White	Green	Green
Diethylamine	109-89-7	White	Black	Red	Black
Dimethylacetamide	127-19-5	White	White	Orange	White
Dimethylsulfoxide	67-68-5	White	White	Green	Green
Dimethyl Formamide	68-12-2	White	White	Green	Green
Dinoseb	88-85-7	White	White	White	Green
Epichlorohydrin	106-89-8	White	White	Purple	White
Ethanol Amine	141-43-5	White	White	White	Green
Ethyl Acetate	141-78-6	White	Black	Green	Green
Ethyl Benzene	100-41-4	White	White	White	Green
Ethylene Glycol	107-21-1	White	Green	Green	Green
Ethylene Oxide Gas	75-21-8	White	White	Green	Green
Formaldehyde	50-00-0	White	White	Green	Green
Formic Acid	64-18-6	White	Green	Green	Green
Gasoline	86290-81-5	White	White	Green	Green
Hexamethyldisilazane	999-97-3	White	White	Green	White
HDI - Hexamethylene Diisocyanate	822-06-0	White	Green	Green	Green

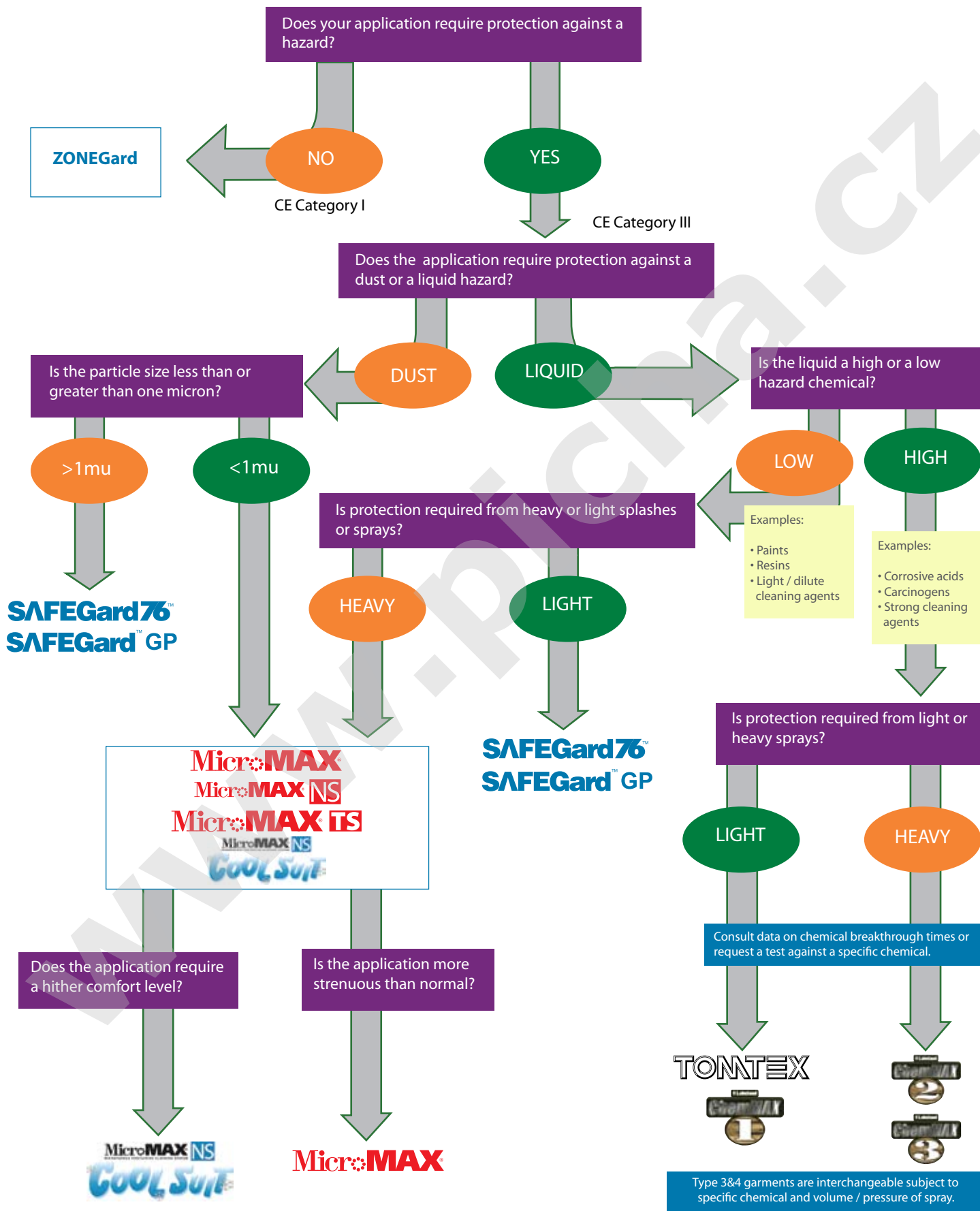
Chemical	CAS NO	T	C1	C2	C3
n-Hexane	110-54-3	White	Black	Green	Green
Hydrochloric Acid	7647-01-0	Blue	Purple	Green	Green
Hydrogen Chloride Gas	7647-01-0	White	White	Purple	Green
Hydrogen Fluoride	7664-39-3	Orange	Black	Green	Green
Hydrogen Fluoride Gas	7664-39-3	White	White	Green	Green
Hydrogen Peroxide	7722-84-1	White	Green	Green	Green
Isoamyl Alcohol	123-51-3	White	White	Green	White
Isopropanol	N/A	White	Green	White	White
Jet Fuel A	N/A	White	White	Purple	Green
Jet Fuel JP-8	N/A	White	White	Green	Green
Lithium Chloride	7447-41-8	White	Green	White	White
Mercury II Nitrate (1000 ppm solution)	7783-34-8	White	White	White	Green
Methanol	67-56-1	White	Blue	Green	Green
Methylamine	74-89-5	White	White	Green	Green
Methyl Chloride Gas	74-87-3	White	Green	Green	Green
MDA - Methylene Di-aniline	83712-44-1	White	Black	Black	Green
MDI - Methylene Diphenyl Diisocyanate	101-68-8	White	Green	Green	Green
Methyl Ethyl Ketone	78-93-3	White	White	Green	Green
Methyl Methacrylate	80-62-6	White	White	Green	Green
Nitric Acid	7697-37-2	Purple	Green	Green	Green
Nitrobenzene	98-95-3	White	Orange	Blue	Blue
Nitrogen Dioxide	10102-44-0	White	White	Green	Green
Oleum	8014-95-7	White	White	Green	Green
Phenol	108-95-2	White	Green	Green	Green
Phosphoric Acid	7664-38-2	White	Green	White	White
Phosphoric Trichloride	7719-12-2	White	White	Black	Red
Propionitrile	107-12-0	White	Green	White	Green
Propylene Oxide	75-56-9	White	Green	Green	Green
Sodium Hydroxide (50%)	7664-93-9	White	Green	Green	Green
Styrene	100-42-5	White	White	Red	Green
Sulfuric Acid (30%)	7664-93-9	White	Green	Green	Green
Sulfuric Acid (96%)	7664-93-9	White	Green	Green	Green
Sulphur Dioxide	7446-09-5	White	White	White	White
Sulfur Trioxide	7446-11-9	White	White	Blue	Yellow
Tetrachloroethylene	127-18-4	White	Black	Green	Green
Tetrafluoroacetic Acid		White	White	Green	White
Tetrahydrofuran	109-99-9	White	Black	Yellow	White
Titanium Tetrachloride	7550-45-0	White	White	Black	Green
Toluene	108-88-3	White	Black	Black	Green
Trichloroethylene	79-01-6	White	White	Black	Green
Trifluoroacetic Acid	76-05-1	White	White	White	Green
Trichlorovinylsilane	75-94-5	White	White	Yellow	White
Vinyl Acetate	108-05-4	White	Black	Red	Green
Vinyl Chloride	75-01-4	White	White	Green	Green
Xylene	1330-20-7	White	White	White	Green

Product Key			
T	TomteX	C2	ChemMAX 2
C1	ChemMAX 1	C3	ChemMAX 3

Permeation Key - breakthrough in mins			
Red	Class 1 >10M	Blue	Class 4 >120M
Orange	Class 2 >30M	Purple	Class 5 >240M
Yellow	Class 3 >60M	Green	Class 6 >480M
Black	Unclassified : < 10M (immediate)		
White	Untested		

**Note:** These permeation times represent a "normalised" breakthrough time defined as the time taken for the permeation rate to reach 150ug under laboratory controlled conditions. This is intended to give an indication of the barrier of the fabric against specific chemicals and not of the duration of "safe use" for a garment. Note that seams and closures may have lower breakthrough times than fabrics: as required by Type 3 & 4 standard EN 14605:2005 seams have also been tested to prove a minimum breakthrough of 10 mins on at least one chemical. Please note that it is the users' final responsibility to determine the suitability of a garment for a specific application

Use the chart to select the appropriate Lakeland garment for the application.



Lakeland's garment selection chart is a broad outline of the key elements for deciding the type of garment for general types of applications. Specific application and environments may feature various unique elements which could affect the garment choice. For this reason the selection chart is not intended to be an infallible tool nor to provide users with a definite technique for determining which garment to use. Other factors may need to be considered. Rather it is intended to offer general guidance on the issues that may be considered. It remains the users' final responsibility to ensure suitability of any garment selected for an application.



## Lakeland Industries Inc... Protection for workers the world over

Lakeland Industries is one of the largest manufacturers of industrial protective clothing in the world. Over 600,000 garments per week are manufactured in a global manufacturing base where the best quality control systems combine with low cost manufacture. The diverse product range includes disposables for protection against liquid chemicals, dusts and biological contaminants, flame and heat protective workwear, firefighters structural and wildland turnout gear, aluminised heat proximity suits, specialist polyester clean room clothing and a range of knitted and dipped gloves for heat, chemical and mechanical protection.

Lakeland manufacturing supports a global sales network headed by key regional distributions centres in North America, Canada, Europe, Asia Pacific, the Middle East and Latin America. Each focuses on providing high quality products at competitive prices backed by excellent service to local markets through safety and industrial distributors.

Throughout Lakeland's global manufacturing and distribution network quality is factor number one; quality derived from good manufacturing practices, quality derived from a clear recognition of the needs of customers; but also the quality of service resulting from sales staff with decades of knowledge of the industry and the products. When it comes to industrial protective clothing, Lakeland are the experts.

These are the reasons that workers worldwide are turning to Lakeland for their protective clothing requirements.

**Because they want to Be Sure.  
They want to Be Safe.**



**Lakeland** Europe  
LAKELAND INDUSTRIES EUROPE LTD

**Lakeland** China  
LAKELAND INDUSTRIES CHINA

**Lakeland** Japan  
LAKELAND INDUSTRIES JAPAN

**Lakeland** India  
LAKELAND GLOVES & SAFETY APPAREL PVT. LTD.

**Lakeland** Latinoamérica  
LAKELAND INDUSTRIES LATIN AMERICA

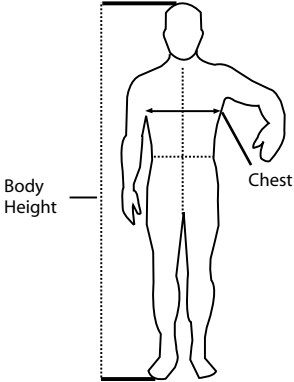
**Lakeland** Asia Pacific  
LAKELAND INDUSTRIES ASIA PACIFIC

**Lakeland**  
INDUSTRIES, INC

## Garment Sizing and Style

All Lakeland coveralls for Europe are made to our unique "Super-B" style pattern, developed especially for the European market. This makes use of the best elements of North American and European styling and sizing. Sizing is generous and roomy, allowing for full freedom of movement without creating stresses resulting from too baggy garments:-

### European Garment Sizing



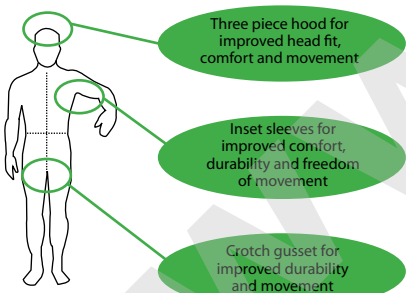
	Body height (cm)	Chest (cm)
Small	164-170	84-92
Medium	170-176	92-100
Large	176-182	100-108
X Large	182-188	108-116
XX Large	188-194	116-124
XXX Large	194-200	124-132

Dimensions refer to wear dimensions rather than actual garment dimensions.

*Note that the selection of the appropriate size is important in maximizing the life and protection of the garment.*

## Lakeland Super-B Style

### Lakeland Coverall Design Super-B Style

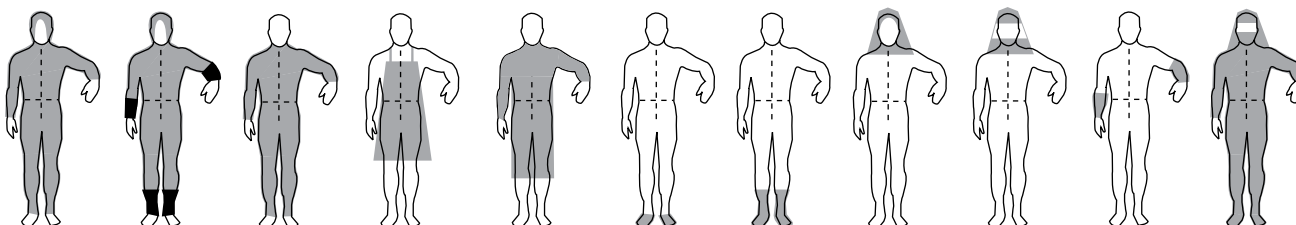


Lakeland garments are made using a unique "Super-B" pattern featuring three key elements for superior ergonomic design.

The Lakeland Super-B style features a combination of three ergonomic elements that together result in the best designed garment available:-

- **Inset sleeves.** The sleeve is set into the arm following the natural body shape. Unlike with traditional European "batwing" style sleeves, this helps "hinge" the arm at the shoulder, thus allowing a full range of movement of the arm without pulling up the lower half of the garment and resulting in less stress on the crotch area. Many batwing sleeves have a low crotch to resolve this problem, resulting in the lower part of the suit being too baggy. Lakeland's Super-B style solves this with the inset sleeve resulting in a better fitting and more durable garment.
- **Three piece Hood.** Many garments use a two piece hood. Two pieces can only form a two dimensional shape. Most heads are three dimensional. The Super-B style uses a three piece hood to fit the head properly, resulting in a better fitting and more comfortable hood.
- **Two piece crotch gusset.** The crotch is the area of any coverall suffering the most stress. Many garments feature a crotch with four simple seams coming together at one point resulting in a singular weakness. The Lakeland Super-B style features two dart-shaped gusset sections to make a more three dimensional and better fitting crotch suffering less stress and resulting in a more durable and comfortable garment.

No other garment features all three of these elements. Lakeland's Super-B styling makes Lakeland coveralls more ergonomically designed than any other available.



**i wear Lakeland**



**i want to Be Sure  
i want to Be Safe**

**Lakeland**  **Europe**  
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