

### MicroMax® NS









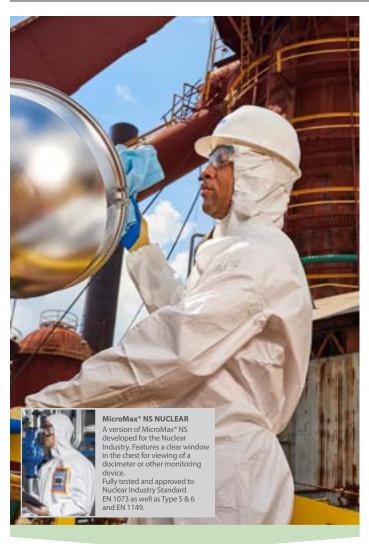












High quality microporous film laminate fabric provides superior liquid resistance against liquids, light oils and light sprays of liquid chemicals.

- Soft and flexible high quality microporous film laminate offers excellent combination of protection and comfort.
- High moisture vapour transmission rate allows escape of vapour to maintain comfort.
- Double-sided tape to zipper cover to allow safe and secure seal over the zip.
- Fabric passes all tests in EN 14126 infectious agent standard at the highest class. Certified to Type 5-b and Type 6-b.
- Lakeland "Super-B" ergonomic styling unique combination of three design elements to optimise fit, durability and freedom of movement.
- Three piece hood for rounder head shape and greater comfort.
- Inset sleeves torso shaped to body to mazimise freedom of movement and negate the need for thumbloops.
- Two piece crotch gusset enhances freedom of movement and reduced crotch splitting.

Physical Properties								
		MicroMax® NS /TS	MicroMax®	SafeGard® GP	SafeGard® 76	Flashspun PE		
Property	EN Std	CE Class	CE Class	CE Class	CE Class	CE Class		
Abrasion Resistance	EN 530	2	1	2	2	2		
Flex Cracking	ISO 7854	4	5	5	5	6		
Trapezoidal Tear	ISO 9073	2	3	3	3	1		
Tensile Strength	EN 13934	1	1	1	1	1		
Puncture Resistance	EN 863	1	2	1	1	2		
Anti-static (Surface Resistance)	EN 1149-1	Pass* (<2.5 x 10°Ω)	Pass* (<2.5 x 10°Ω)	Pass* (<2.5 x 10°Ω)	Pass* (<2.5 x 10°Ω	Pass* (<2.5 x 10°Ω		
Seam Strength	EN 13935-2	3	3	3	3	3		

<sup>\*</sup> According to EN 1149-5

#### **Chemical Repellency and Penetration EN 6530** R Р Chemical R R Sulphuric Acid 30% 3 3 3 3 3 3 3 3 CAS No. 67-64-1 Sodium Hydroxide 3 3 3 3 3 3 3 3 3 CAS No. 1310-73-2 O-Xylene 3 2 3 1 3 NT NT NT NT CAS No. 75-15-0 Butanol 3 3 3 NT NT NT NT 2 1 CAS No. 75-09-2

Breathability - measured by air permeability and moisture vapour transmission rate (MVTR)								
	MicroMax® NS/TS	MicroMax®	SafeGard® GP	SafeGard® 76	Flashspun PE	Cotton T-shirt		
Air permeability cubic feet/minute (cfm)	<0.5	<0.5	40	40	~3.3	180		
MVTR	119.3	NT	NT	NT	111.2	NT		

### Infectious Agent / Biological Hazard Protection

Tested according to EN 14126. This consists of four different tests to assess protection against different forms of classification. Note these tests are on fabric only. We would always recommend a garment with

sealed seams such as MicroMax® 15 for protection against infectious agent nazards.						
Test Description	Test No.	MicroMax® NS/TS	SafeGard® GP/76	Flashspun PE		
Protection against blood and body fluids	ISO 16604:2004	6 (max is 6)	Not recommended	<1		
Protection against biologically contaminated aerosols	ISO 22611:2003	3 (max is 3)	Not recommended	1		
Protection against dry microbial contact	ISO 22612:2005	3 (max is 3)	Not recommended	1		
Protection against mechanical contact with substances containing contaminated liquids	EN 14126:2003 Annex A	6 (max is 6)	Not recommended	1		

### MicroMax® NS Styles



Style code 428 erall with elasticated hood, cuffs, waist & ankles.

Sizes: SM - 3X



Style code L428 overall with elasticated hood, cuffs with thumb loops, waist & ankles.

Sizes: SM - 3X



Style code 414 Coverall with elasticated hood, cuffs, waist and attached socks



Style code L414 hood, cuffs with thumb loops. vaist, ankles and attached

Sizes: SM - 3X

Sizes: SM - 3X



Style code 412 Coverall with collar elasticated cuffs, thumb loops, waist & ank Size: MD - XL



Style code 101 pockets. 4 stud fastening.

Style code 022 - Standard overshoes with elasticated top

Style code 022NS - Overshoes with elasticated top, anti-slip sole



Style code 024 elasticated ends.



Style code 020 face opening.

Size: MD - XL



Size: One size

Available in: White Orange

Not all styles are available from European stock in this fabric. Please contact our sales office for information on stock items

# Clothing For Protection against Type 5 and 6 Hazards

### Essential Guide to Garment Selection

There are many different brands of Type 5 & 6 coveralls in the market - yet there are only three essential types of fabrics used to make them. So which fabric is the best choice? That depends on the application and the balance to be achieved between protection, comfort and durability.



Type 5 EN 13982

protection against hazardous dry particles



EN 1073-2

protection against dust contaminated with radiation



Type 6 EN 13034

protection against reduced/light liquid sprays and splashes

#### Type 5- Hazardous Dry Particles

- Spray cabin filled with dust
- Subject performs exercise on treadmill
- 3 particle counters *inside* the suit
- Particle "Inward leakage" calculated
- Recorded as % of inward leakage (TIL)



EN 1073-2

testing is a variation of the standard Type 5 test.

#### Type 6 - Reduced Liquid (aerosol) Spray

- Four nozzles aerosol spray of liquid
- Subject rotates on turntable
- Inside absorbent suit checked for penetration
- Pass or Fail according to test criteria



Three types of fabric are used to make all Type 5 & 6 garments on the market.



Flashspun Polyethylene (FSPE)



SMS/SMMS - Spunbond-Meltblown-Spunbond **Lakeland SafeGard**™



Microporous Film Laminate (MPFL) **Lakeland MicroMax®** 

All Type 5 & 6 garments on the market are one of these or variations of these.

# How do these fabrics compare? Three important factors can be considered:

## 1. Liquid Protection

Type 6 CE testing includes liquid repellency and penetration tests against four chemicals.

In two of the four chemicals, Lakeland MicroMax® options achieve superior results than the closest alternative.

CE testing for Infectious Agents to EN 14126 includes tests against four types of contamination. In all four tests MicroMax® options achieve superior results and the highest class compared to the FSPE alternative, which is unclassified in the critical ISO 16604 test.

# 2. Physical Properties

Testing as part of CE certification allows comparison of strength properties: abrasion - tensile strength trapezoidal tear etc.

In comparisons of the three fabric types Lakeland SafeGard™ or MicroMax® options offer a superior choice compared to the alternative FSPE option in most cases.

Comfort is primarily a result of air permeability.

## 3. Comfort and Breathability

Independent testing indicates the difference between MicroMax® and FSPE is minimal and close to zero. Both have very low air permeability. The Lakeland SafeGard<sup>™</sup> option has an air permeability over 10 times that of the alternatives and is the superior choice for a comfortable garment.

A common sense approach and simple 'home' tests clearly confirm both the low air-permeability of MicroMax® and FSPE and the superior air-permeability of SafeGard™.

Where protection and comfort are required, Lakeland Cool Suit® options provide the best of both MicroMax® and SafeGard™ fabrics and may be the best choice available.

For all three factors, Lakeland garments provide the best choice ....

Type 5 and 6 garments can be selected on the basis of a combination of three factors: 1. Protection

- 2. Physical Properties
- 3. Comfort and Breathability

Use the QR Code or visit:

https://promo.lakeland.com/europe/guide-to-type-5-and-6-protective-coveralls to download our complete Guide to Type 5 & 6 Coverall selection









Competitor brand results are from competitors' own websites and were correct at the time of publication. Users are recommended to check up to date information with competitors before making any assessment based on specific chemicals. Other chemical test results may be available from competitors.



Limited. A division of Lakeland Industries Inc, USA