

# SafeGard™ GP



Serged (stitched)  
overlapped  
seams



Entry level SMMS based hazardous dust (Type 5) and liquid aerosol (Type 6) protective coverall with high comfort level.

- 45gsm SMMS fabric with high breathability and superior level of comfort.
- Air permeability over 10 times that of flash-spun polyethylene or microporous film laminates.
- Air permeability negates generation of the bellows effect which on low-breathable fabrics encourage penetration of particles through seams and closures.
- Double-sided tape to zipper cover to allow safe and secure seal over the zip.
- 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 maximise 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* ( $<2.5 \times 10^9 \Omega$ )	Pass* ( $<2.5 \times 10^9 \Omega$ )	Pass* ( $<2.5 \times 10^9 \Omega$ )	Pass* ( $<2.5 \times 10^9 \Omega$ )	Pass* ( $<2.5 \times 10^9 \Omega$ )
Seam Strength	EN 13935-2	3	3	3	3	3

\* According to EN 1149-5

## Chemical Repellency and Penetration EN 6530

	MicroMax® NS/TS		MicroMax®		SafeGard® GP		SafeGard® 76		Flashspun PE	
Chemical	R	P	R	P	R	P	R	P	R	P
Sulphuric Acid 30% CAS No. 67-64-1	3	3	3	3	3	3	3	3	3	3
Sodium Hydroxide CAS No. 1310-73-2	3	3	3	3	3	3	3	3	3	3
O-Xylene CAS No. 75-15-0	3	2	3	3	NT	NT	NT	NT	1	1
Butanol CAS No. 75-09-2	3	2	3	3	NT	NT	NT	NT	2	1

## 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® TS for protection against infectious agent hazards.

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

## SafeGard™ GP Styles



**Style code 528**  
Coverall with elasticated  
hood, cuffs, waist &  
ankles.

Sizes: SM - 3X



**Style code L528**  
Coverall with elasticated  
hood, cuffs with thumb  
loops, waist & ankles.

Sizes: SM - 3X



**Style code 514**  
Coverall with elasticated  
hood, cuffs, waist and  
attached socks.

Sizes: SM - 3X



**Style code L514**  
Coverall with elasticated  
hood, cuffs with thumb  
loops, waist and attached  
socks.

Sizes: SM - 3XL



**Style code 101**  
Lab coat with two  
hip pockets. 4 stud  
fastening.

Size: MD - XL



**Style code 101Z**  
Lab coat with two  
hip pockets. Zip  
fastening.

Size: MD - XL



**Style code 527**  
Rear entry gown with  
elasticated sleeves  
and ties.

Size: MD - XL



**Style code 024**  
50cm sleeves with  
elasticated ends.

Size: One size



**Style code 020**  
Cape hood with  
elasticated face  
opening.

Size: One size



**Style code 022**  
Standard overshoes  
with elasticated  
tops.

Size: One size



**Style code 022NS**  
Overshoes with  
elasticated tops,  
anti-slip soles.

Size: One size



**Style code 022ANS**  
Overshoes with  
elasticated tops,  
anti-static soles.

Size: One size

Available in: White ☐ Blue ☒





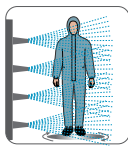
Not all styles are available from European stock in this fabric. Please contact our sales office for information on stock items.



# 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.

 <b>Type 5</b> <b>EN 13982</b> protection against hazardous dry particles	 <b>EN 1073-2</b> protection against dust contaminated with radiation	 <b>Type 6</b> <b>EN 13034</b> protection against reduced/light liquid sprays and splashes
<b>Type 5- Hazardous Dry Particles</b> <ul style="list-style-type: none"> <li>- Spray cabin filled with dust</li> <li>- Subject performs exercise on treadmill</li> <li>- 3 particle counters <i>inside</i> the suit</li> <li>- Particle "Inward leakage" calculated</li> <li>- Recorded as % of inward leakage (TIL)</li> </ul> 	<b>EN 1073-2</b> testing is a variation of the standard Type 5 test.	<b>Type 6 - Reduced Liquid (aerosol) Spray</b> <ul style="list-style-type: none"> <li>- Four nozzles - aerosol spray of liquid</li> <li>- Subject rotates on turntable</li> <li>- Inside absorbent suit checked for penetration</li> <li>- Pass or Fail according to test criteria</li> </ul> 

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:

<b>1. Liquid Protection</b>	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.
<b>2. Physical Properties</b>	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.	
<b>3. Comfort and Breathability</b>	Comfort is primarily a result of air permeability. Independent testing indicates the difference between MicroMax® and FSPE is minimal and close to zero. Both have very low air permeability. The Lakeland SafeGard™ 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™. <b>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.</b>
Type 5 and 6 garments can be selected on the basis of a combination of three factors: <ol style="list-style-type: none"> <li>1. Protection</li> <li>2. Physical Properties</li> <li>3. Comfort and Breathability</li> </ol>		For all three factors, Lakeland garments provide the best choice ....



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.