

# MicroMax® TS Cool Suit



Stitched & Taped Seams



Microporous film laminate coverall with taped seams and covered breathable rear panel.

- MicroMax® TS version of the Cool Suit for enhanced, lightweight Type 4 comfort.
- Breathable and comfortable Type 4 protection.
- Critical garment areas – the torso front, arms legs and hood use MicroMax® NS fabric and taped seams for superior protection
- Rear breathable panel is covered by a flap of MicroMax® NS fabric – sealed at top and sides.
- Lower panel edge left open to allow circulations of air inside & out
- White with orange rear panel and taped seams for easy identification.
- 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 x 10 <sup>9</sup> Ω)	Pass* (<2.5 x 10 <sup>9</sup> Ω)	Pass* (<2.5 x 10 <sup>9</sup> Ω)	Pass* (<2.5 x 10 <sup>9</sup> Ω)	Pass* (<2.5 x 10 <sup>9</sup> Ω)
Seam Strength	EN 13935-2	3	3	3	3	3

\* According to EN 1149-5

### Chemical Repellency and Penetration EN 6530

Chemical	MicroMax® NS/TS		MicroMax®		SafeGard® GP		SafeGard® 76		Flashspun PE	
	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)

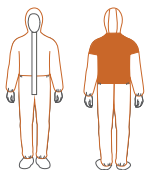
	MicroMax® NS/TS	MicroMax®	SafeGard® GP	SafeGard® 76	Flashspun PE	Cotton T-shirt
Air permeability cubic feet/minute (cfm)	<0.5	<0.5	40	40	~3.3	180
MVTR	119.3	NT	NT	NT	111.2	NT

### 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

## MicroMax® TS Cool Suit Style



### Style Code: C428

Coverall with elasticated hood, cuffs, waist and ankles. Breathable rear panel.

Sizes: SM - 3X

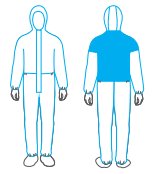
Available in: White with orange seams and rear panel



# Introduction: The Cool Suit® Principle - Breathable Protection

## What is a Cool Suit®?

- What makes a protective coverall comfortable?
- How do Cool Suits® work?
- What Cool Suit® variations are available?



## What makes a protective coverall comfortable?

The primary influence on comfort is air-permeability - *the tendency to allow air to circulate in and out of the suit*

The only truly breathable fabric for Type 3, 4, 5 and 6 coveralls is SMS - *primarily suitable for dust and light or low level liquid splash protection.*

Claimed Moisture Vapour Transmission Rate(MVTR) is not air-permeability or true breathability and has only a very limited effect on comfort.  
*Comfort needs air-permeability*

Fabrics with an effective barrier cannot also feature high air permeability.  
*You can have an effective barrier or high air permeability... but not both*

Lakeland Cool Suits are a coverall design which combines high breathability fabrics with high-protection fabrics for Type 4, 5 and 6 protection.

## How do Cool Suits® work?



All Cool Suits® feature a rear panel of highly air-permeable fabric.

Air can circulate in and out of the coverall through the breathable panel, keeping the wearer more cool and comfortable.

In the case of Type 4 Chemical Protective Cool Suits®, the breathable panel is protected by a cover sealed at top and the sides and left open at the bottom.



The critical protection areas - the **torso** front, the **legs**, the **arms** and **hood** use Lakeland's effective range of protective fabrics, depending on protection type.

The 'Bellows Effect', the movement of air inside the suit created by movement helps pump air in and out of the suit through the breathable panel.

**Type 4 Cool Suit Protection:** Most chemical protective applications are Type 4 and NOT Type 3. Distinguishing between the two can have benefits in terms of comfort and cost.  
*See Lakeland 'Guide to Chemical Suit Selection' for more info.*

## What Cool Suits® options are available?



Type 5 & 6 Protection



Type 4 Chemical Protection



Type 4 Chemical Protection with FR



MicroMax® NS Cool Suit



MicroMax® TS Cool Suit



ChemMax® 1 Cool Suit



ChemMax® 3 Cool Suit



Pyrolon™ CRFR Cool Suit