

# Interceptor® Plus

Powered by PermaSURE®



Stitched & Taped Seams



Type 1aET gas-tight coverall. Use with internal BA for protection against hazardous gases & vapours

- Certified to EN 943-1 (Type 1a) and EN 943-2 (Type 1aET-for Emergency Teams.)
- Multi-layer film technology creates light and flexible high barrier against a wide range of high hazard chemicals. Weight 365gsm.
- Superior design featuring double-taped seams (inside & out).
- Standard or wide-vision visor options; two-layer visor with unique sealing technology for high chemical barrier.
- Double layer chemical glove system.
- European manufactured fabric. Tested against a full range of chemical warfare agents for anti-terror and civil defence operations.
- Very soft and flexible material for enhanced comfort.
- Front and rear entry design options.
- Inner North Silvershield® chemical glove with outer 27 mil butyl glove: bond between glove layers to ensure comfort and easy removal of hands.
- Two rear mounted exhaust valves.
- Attached sock boot with boot overflaps.

### Physical Properties

		Interceptor® Plus	Brand E	Brand F	Brand G
Property	EN Std	CE Class	CE Class	CE Class	CE Class
Abrasion Resistance	EN 530	6	6	6	6
Flex Cracking	ISO 7854	2	1	1	5
Trapezoidal Tear	ISO 9073	6	5	3	3
Tensile Strength	EN 13934	4	4	4	6
Puncture Resistance	EN 863	2	2	2	3
Burst Strength	EN 13938	NA	NA	NA	NA
Seam Strength	EN 13935	6	5	5	6

### Permeation Test Data \*

Liquid chemicals from EN 6529 Annex A. For a full list of chemicals tested see Permeation Data Tables or Chemical Search at [www.lakeland.com/europe](http://www.lakeland.com/europe). Tested at saturation unless stated.

		Interceptor® Plus	Brand E	Brand F	Brand G
Chemical	CAS No.	CE Class	CE Class	CE Class	CE Class
Acetone	67-64-1	6	6	6	6
Acetonitrile	70-05-8	6	6	6	6
Carbon Disulphide	75-15-0	6	6	6	6
Dichloromethane	75-09-2	6	6	6	6
Diethylamine	209-89-7	6	6	6	6
Ethyl Acetate	141-78-6	6	6	6	6
n-Hexane	110-54-3	6	6	6	6
Methanol	67-56-1	6	6	6	6
Sodium Hydroxide (40%)	1310-73-2	6	6	6	6
Sulphuric Acid (96%)	7664-93-9	6	6	6	6
Tetrahydrofuran	109-99-9	6	6	6	6
Toluene	95-47-6	6	6	6	6
Chemical-gas					
Ammonia 99%	7664-41-7	6	6	6	6
Chlorine 99.5%	7782-50-5	6	6	6	6
Hydrogen Chloride (99%)	7647-01-0	6	6	6	6

\* NB = normalised breakthrough. This is the time taken for the PERMEATION RATE to reach 1.0µg/minute/cm<sup>2</sup> in controlled laboratory conditions at 23°C. It is NOT the point at which breakthrough first occurs.

For safe use times see Selection Guide and PermaSURE®.

Brands F and G refer to similar competitor's products to allow simple comparison of physical properties and chemical permeation. Boxes shaded green indicate where the Lakeland option is at least as good as the competitor offer.

### Interceptor® Plus Styles



Fully encapsulated suit featuring double layer visor, gas-tight zip and attached boots and gloves:

- Expanded back, attached sock boots with boot flaps
- Seams sealed inside and out
- 122cm gas tight zipper with outer storm flaps
- Neoprene/North Silvershield double layer attached gloves
- 2 exhaust valves
- Inside waist belt
- Storage bag included

#### Basic Style Options

- INT640 - Front entry / standard width visor
- INT650 - Rear entry / standard width visor
- INT 640W - Front entry / wide vision visor
- INT 650W - Rear entry / wide vision visor

Available in: Blue  Yellow 

Interceptor® Plus is Lakeland's flagship Type 1aET gas-tight suit designed for protection against hazardous chemical gases and vapours.

Fully sealed to the external environment, the Interceptor® coverall is worn with SCBA inside the suit - a generous backpack allows use of most portable breathing apparatus and Interceptor® Plus features a number of design features making it the best choice for gas-tight protection available.



Unique and patented "etched" sealing system for more secure seal between visor and garment fabric.

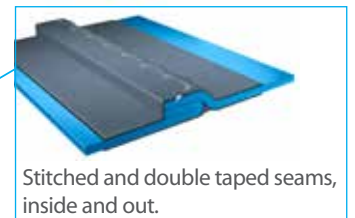
Double layer face shield:  
Outer - 0.25mm Teflon  
Inner - 1.00mm PVC  
Offers superior chemical barrier.

Standard (42cm) or wide-vision (63cm) visor options.

2 rear exhaust valves.



Soft and flexible 365gsm multi-layer fabric... the unique combination of polymers results in a high barrier to a wide range of chemicals.



Stitched and double taped seams, inside and out.

122cm gas-tight zip with front-entry or rear-entry options.

Carry case, along with cotton liner gloves, anti-mist wipe and gel supplied with each garment.

Attached sock with boot overlap.

Chemical Warfare Agents				
Interceptor® Plus has been tested independently against permeation by common chemical warfare agents according to the FINABEL test method. (1 x 50 µg / 37°C / 24H)				
Agent	Acronym	No of tests	Fabric result hours:min	Seam result hours:min
Sulfur mustard	HD	3	>24:00	>24:00
Lewisite	L	3	>24:00	>24:00
V-Agent	VX	3	>24:00	>24:00
Sarin	GB	3	>24:00	>24:00
Tabun	GA	3	>24:00	>24:00
Soman	GD	3	>24:00	>24:00

Note: that testing has been conducted against the Interceptor® Plus fabric and the seam. In the tests, the challenge was made against the seam with 50% of the fabric only and 50% on the seam. As can be seen no permeation was recorded in 24 hours across 3 tests on each agent.

The new Interceptor Plus version works with:

**PermaSURE**

Safe-Use Time Toxicity Modeller  
Contact Lakeland for more details.

**Shelf-life and Storage**

Interceptor® Plus gas-tight chemical suits are manufactured using inert polymers that are unaffected in normal storage conditions. If stored in dry conditions, away from direct sunlight and in normal temperatures (-10°C to 50°C) a shelf life of 10 years can be expected.

All Interceptor® Plus suits are pressure tested before leaving the factory and are sealed in a polythene bag before packing into the outer storage bag. Whilst we recommend pressure testing on receipt if the garment is to be placed in service (because we cannot control the behaviour of freight companies and damage may be suffered during transit) a check of the polythene bag before storage or use will confirm that the packaging has remained unopened and the garment undamaged since leaving the factory. If going into storage, please do not open the polythene bag. Again, good practice recommends at least annual testing of garments in use, though this is not necessary for garment in storage and provided the polythene bag remains intact.

Any chemical suit should always be at least visually inspected before use; if any damage or wear is apparent then the suit should be pressure tested and if not leak-tight should be downgraded to a training suit or disposed of.

For comparison with alternatives, see overleaf and 'The Guide to Chemical Suit Selection' for a list of chemical permeation test breakthrough results. For assessment of safe-use times, Interceptor® Plus works with the unique PermaSURE® system... an on-line app for calculation of safe-use times for over 4000 chemicals.

\* 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. PermaSURE® is Patent Pending and a Trade Name of Industrial Textiles & Plastics Ltd