

Type 1a



EN943-1:2015  
+A1:2019

# Interceptor<sup>®</sup> Plus Series

Chemical Protective Clothing

Powered By  
PermaSURE<sup>®</sup>



# Lakeland

Protect Your People<sup>™</sup>





## Interceptor® Plus Brand Features

Made from a high strength nonwoven with non-halogenated films on either side.

Fabrics have better abrasion resistance, higher tensile strength and puncture resistance, better durability.

High loft, polyester, buffer/diffusion layer in the center.

Specifically developed for protection against toxic, corrosive gases, liquids and solid chemicals. According to ASTM F739 test, the time of chemical permeation rate to achieve  $0.1 \mu\text{g}/\text{cm}^2/\text{min}$  is more than 480 min for most of the chemicals that have tested.

Colors: Orange, Yellow, Blue



## Interceptor® Plus Physical Properties

Physical Property	Test Method	Units	Test Results	Level
Basic Weight	-	g/cm <sup>2</sup>	363	-
Abrasion resistance	EN530 method 2	No. of cycles	> 2000	6
Flex cracking resistance	EN ISO 7854	No. of flexes	> 1000	1
Flex cracking resistance at -30 C	EN ISO 7854	No. of flexes	> 200	2
Tensile strength(MD/CD)	EN ISO 13934-1	N	630/396	4
Tear resistance(MD/CD)	ISO 9073-4	N	246/220	6
Puncture resistance	EN863	N	43.6	2
Resistance to ignition	EN13274-4 method 3	-	Pass	-
Resistance to flame	N13274-4 method 3	-	Pass	2

## Interceptor® Plus Permeation Data -ASTM F739

Challenge Chemical	CAS No.	Physical State	Concentration	Normalized Breakthrough Time
1,3-Butadiene	106-99-0	Liquid	99%	>480
2,2,2-Trichloroethanol	115-20-8	Liquid	99%	>480
2,3 Dichloro- 1Propene	78-88-6	Liquid	98%	>480
2,4-Dichlorophenol	120-83-2	Liquid	99%	>480
2,4-dichlorophenoxy Acetic Acid	94-75-7	Liquid	99%	>480
4-Bromofluorobenzene	460-00-4	Liquid	99%	>480
Acetic Acid	64-19-7	Liquid	99%	>480
Acetone	67-64-1	Liquid	99%	>480
Acetonitrile	75-05-8	Liquid	99%	>480
Acetyl Chloridein	75-36-5	Liquid	98%	>480
Acrolein	107-02-8	Liquid	98%	>480
Acrylic Acid	79-10-7	Liquid	99%	>480
Acrylonitrile	107-13-1	Liquid	99%	>480
Allyl Chloride	107-05-1	Liquid	99%	>480
Ammonia	7664-41-7	Gas	99%	>480
Ammonium Fluoride	12125-01-8	Liquid	40%	>480
Bromine	7726-95-6	Liquid	99%	36
Carbon Disulfide	75-15-0	Liquid	99%	>480
Chlorine	7782-50-5	Gas	99%	>480
Dichloromethane	75-09-2	Liquid	99%	>480
Diethylamine	109-89-7	Liquid	99%	>480
Dimethylformamide N,N-	68-12-2	Liquid	99%	>480
Ethyl Acetate	141-78-6	Liquid	99%	>480
Ethylene Oxide	75-21-8	Gas	99%	>480
Hexane	110-54-3	Liquid	99%	>480
Hydrofluoric Acid	7664-39-3	Liquid	70%	>480
Hydrogen Chloride	7647-01-0	Gas	99%	>480
Hydrogen Fluoride	7664-39-3	Gas	99%	>480
Methanol	67-56-1	Liquid	99%	>480
Methyl Chloride	74-87-3	Gas	99%	>480
Nitrobenzene	98-95-3	Liquid	99%	>480
Phosphorus Pentachloride	10026-13-8	Liquid	99%	>480
Sodium Hydroxide	1310-73-2	Liquid	SAT.	>480
Sodium Hydroxide	1310-73-2	Liquid	50%	>480
Sulfuric Acid	7664-93-9	Liquid	98%	>480
Sulfur Dioxide	7446-09-5	Gas	99%	>480
Sulphuryl Chloride	7791-25-5	Liquid	97%	>480
Tetrachloroethylene	127-18-4	Liquid	99%	>480
Tetrahydrofuran	109-99-9	Liquid	99%	>480
Thionyl Chloride	7719-09-7	Liquid	99%	90
Toluene	108-88-3	Liquid	99%	>480
Vinyl Chloride	75-01-4	Liquid	99%	>480

**This next generation of Interceptor® fabric is now compatible with the PermaSURE® Toxicity Risk Modeller, giving you access to the most comprehensive chemical database in the industry. Advantages of PermaSURE® :**

Models permeation rates and provides safe-use times by incorporating environmental, temperature and chemical exposure factors.

State-of-the-art technology developed initially by leading Polymer chemists for defense forces to quickly determine which suits are needed for various chemical warfare agents and dual use chemicals.

Based on the known molecular characteristics and behavior of 4000+ chemicals interacting with Interceptor Plus fabric.

Website : <http://www.lakeland-permasure.com/app/>



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**Interceptor® Plus Level A Gas-Tight Chemical Protective Suit**

Interceptor® Plus is the apex of Lakeland Industries' chemical protective clothing line and is the ultimate in chemical protection with the most extensive chemical data in the industry, provide the Level A protection of gas, vapor, aerosol, liquids, harmful contaminants or particulate.

Rear covered one-way exhaust valve

**Fabric:**  
 Made from a high strength nonwoven with non-halogenated films on either side  
 High loft, polyester, buffer/diffusion layer in the center  
 Specifically developed for protection against toxic, corrosive gases, liquids and solid chemicals

**Visor:**  
 Double layer visor system (PVC inside, Teflon outside) with unique, patented etched sealing system for a stronger and more secure seal

**Storm flap:**  
 Front entry 122cm gas-tight zipper with double protective storm flap

Generously sized rear pouch to accommodate most SCBA units

**Glove:**  
 Double layer glove system (inner polymer chemical glove / outer butyl glove)

One-way exhaust valve

Attached sock with boot overlap for full seal

2 layer "wide-view" faceshield.

ICP640: Fully Encapsulated Gas-Tight Suit  
 ICP650: Rear Encapsulated Gas-Tight Suit

ICP640W: Fully Encapsulated Wide-View Gas-Tight Suit  
 ICP650W: Rear Encapsulated Wide-View Gas-Tight Suit





## Interceptor® Plus series products



### ICP645A Fully Encapsulated Gas-Tight Suit For Thermal Protection

- Outer layer is aluminized fiberglass which can protect against above 95% heat emission; inner layer is level A gas-tight chemical protective coverall;
- Fully encapsulated front entry gas protective suit (Level A), expanded back;
- Sealed seam plus inside and out, 48" zipper, double storm flap with hook and loop closure;
- 2 layers face shield (10 mil Teflon /40 mil PVC);
- Include the glove system, 2 exhaust valves, attached sock boots with boot flaps, 15" waist belt with 3 belt loops sewn (inside) and sealed. Storage bag included.



### ICP450 Level B Encapsulated Suit

Encapsulated suit (Level B), rear entry, expanded back, 48" zipper, storm flap, 20 mil PVC faceshield, elastic wrists, 2 exhaust ports with shroud, attached sock boots with boot flaps.



### ICP400 Level B Flat Back

Rear entry. Thickening PVC face shield. With connector on waist, which can connect all kinds of air tube. Protection against long-time hazards.



### ICP130 Coverall

Coverall, hood, elastic face, wrists and ankles. Front storm flap with hook and loop closure.



### ICP165 Level B Coverall

Coverall, respirator fit hood, double storm flap with hook and loop closure, elastic face and wrists, attached boots with boot flaps.



### ICP155 Level B Coverall

Coverall, expanded back for SCBA, respirator fit hood, storm flap with hook and loop closure, elastic face and wrists, attached boots.

Note: Chemical protective coverall with socks which need to wear chemical boots over it.



### ICP491/ICP497 Level A encapsulated training suit

Made of Interceptor® Plus fabric, 20mil PVC face shield, 48" zipper, double storm flap, attached boots sock, training use only.



### 00220 Vapor Tight Test Kit

Maintain your encapsulated suits with this easy to use test kit. Kit features an easy-to-read Magnehelic pressure gauge, digital timer, sturdy brass and steel fittings, hoses and connectors in a waterproof case. Complete instructions included. 00220 Universal test kit for Lakeland, DuPont and Kappler Level A and NFPA Certified suits. Features an integrated blower for suit inflation.