

# Tychem<sup>®</sup> TK

CHEMICAL PROTECTIVE CLOTHING



[www.lakeland.com](http://www.lakeland.com)

# Lakeland

## Tychem® TK. Superior Chemical Protective Clothing from Lakeland.

**T**ychem® TK is the best protection you can wear in hazardous chemical environments. This line of chemical protective clothing is especially suited for protection against toxic, corrosive gases, liquids and solid chemicals. Developed by DuPont, Tychem® TK garments can be found in industrial, hazmat and domestic preparedness applications. They offer dependable protection with performance that has been proven over a wide range of chemicals.

Tychem® TK garments are extremely durable and puncture resistant. The chemical barrier properties of TK have been tested against 260 challenge chemicals. Permeation data proves the excellent protective capabilities of Tychem® TK. Lakeland's Tychem® TK garments are all lime-yellow in color, highly visible in both bright and dim light. Easily seen in hazy or smoky environments, this line-up of chemical protective clothing is the first line of defense in hazardous material situations.

### Tychem® TK Physical Properties

Basis Weight (oz/yd<sup>2</sup>) . . . 10.6 (ASTM D3776)

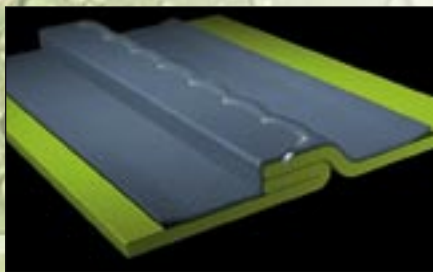
Thickness (mils) . . . . . 26 (ASTM D1777)

Ball Burst (lbf) . . . . . 187 (ASTM D3787)

Grab Tensile (lbf) . . . . . 188/180 (ASTM D5034)\*

Trap Tear (lbf) . . . . . 53/52 (ASTM D5733)\*

\* MD/CD



Lakeland's Tychem® TK Level A and Level B Suits feature heat sealed seams. These seams are sewn and then sealed with a heat activated tape. This method ensures liquid-proof seams for maximum protection.



1-800-645-9291

www.lakeland.com

## P E R M E A T I O N   D A T A

### Permeation data for ASTM recommended list of chemicals for evaluating protective clothing materials (ASTM F1001)

Chemical Name	Physical Phase	Normalized Breakthrough Time (min.)	Average Permeation Rate (µg/cm <sup>2</sup> /min)
Acetone	L	>480	<0.01
Acrylonitrile	L	>480	<0.0003
Ammonia Gas	G	>480	<0.1
1, 3-Butadiene	G	>480	<0.07
Carbon disulfide	L	>480	<0.02
Chlorine Gas	G	>480	<0.02
Dichloromethane	L	>480	<0.03
Dimethylamine	G	>480	<0.05
N, N-Dimethylacetamide	L	>480	<0.006
Ethyl Acetate	L	>480	<0.06
Ethylene Oxide Gas	G	>480	<0.1
n-Hexane	L	>480	<0.01
Hydrogen Chloride	G	>480	<0.1
Methanol	L	>480	<0.1
Methyl chloride	G	>480	<0.02
Nitrobenzene	L	>480	<0.1
Sodium hydroxide, 50%	L	>480	<0.1
Sulfuric acid, 98%	L	>480	<0.1
Tetrachloroethylene	L	>480	<0.01
Tetrahydrofuran	L	>480	<0.04
Toluene	L	>480	<0.02

> = greater than, < = less than

For specific permeation data and breakthrough times for other chemicals, contact the DuPont Protective Apparel Fax-On-Demand Service at 1-800-558-9329.

### Permeation data for 595 Class/Subclass Chemical Warfare Agents

Agent	Common Name	CAS Number	Protocol	Avg. Breakthrough Time	Minimum Detectable Permeation (µg/cm <sup>2</sup> )
GA	Tabun	77-80-6	DN5	>12 hrs.	<0.0001
GB	Sarin	107-44-8	DN5	> 12 hrs.	<0.0001
			DN6	>12 hrs.	<0.00024
GD	Soman	99-64-0	DN 5	>12 hrs.	<0.0001
			DN 6	>12 hrs.	<0.0001
HD	Sulfur Mustard	505-60-2	DN3	> 12 hrs.	<0.0001
			DN4	> 12 hrs.	<0.2000
L	Lewisite	541-25-3	DN3	> 12 hrs.	<0.0060
			DN4	> 12 hrs.	<0.2000
VX	VX	50782-69-9	DN5	>12 hrs.	<0.0001
			DN6	>12 hrs.	<0.00024

> = greater than, < = less than

**Fabric Test Protocols** – All tests performed in triplicate for DuPont Nonwovens by an independent accredited laboratory at 22° C, 50% R.H.

Protocol DN3 – MIL STD-282, Method T-209 (HD) or modified for Lewisite, for 12 hours at 10 g/m<sup>2</sup>.

Protocol DN4 – MIL STD-282, Method T-209 (HD) or modified for Lewisite, for 12 hours at 100 g/m<sup>2</sup> (Total coverage).

Protocol DN5 – MIL STD-282, Method T-209 (GB) or modified for GA, GD, and VX, for 12 hours at 10 g/m<sup>2</sup>.

Protocol DN5 – MIL STD-282, Method T-209 (GB) or modified for GA, GD, and VX, for 12 hours at 100 g/m<sup>2</sup> (Total coverage).



**NFPA 1991 certified to current edition.**



**Tychem® TK 645 NFPA Ensemble**

Fully encapsulated front entry vapor-protective suit (Level A), expanded back, sealed seams inside and out, 48" zipper, double storm flap with Velcro®, 2 layer faceshield (10 mil Teflon®/40 mil PVC), 3 layer glove combination of Viton®, North® Silvershield®, and outer knit Kevlar®, 3 Pirelli® valves, attached sock boots with boot flaps, 1.5" waist belt with 3 belt loops sewn (inside) and sealed. Includes aluminum fiberglass overcover.

Storage bag and Bata Hazmax® boots included.



**Tychem® TK 650 Level A Suit**

Fully encapsulated rear entry vapor-protective suit (Level A), expanded back, sealed seams inside and out, 48" zipper, double storm flap with Velcro®, 2 layer faceshield (10 mil Teflon®/40 mil PVC), 3 layer glove combination of Butyl®, North® Silvershield®, and outer knit Kevlar®, 2 Pirelli® valves, attached sock boots with boot flaps, 1.5" waist belt with 3 belt loops sewn (inside) and sealed. Storage bag included. *Also available with Wide-View lens system.*

**All suits are available in front or rear entry configurations and in sizes up to 5X... Call Lakeland Customer Service for Details at 1-800-645-9291.**



**Tychem® TK 640 Level A Suit**

Fully encapsulated front entry vapor-protective suit (Level A), expanded back, sealed seams inside and out, 48" zipper, double storm flap with Velcro®, 2 layer faceshield (10 mil Teflon®/40 mil PVC), 3 layer glove combination of Butyl®, North® Silvershield®, and outer knit Kevlar®, 2 Pirelli® valves, attached sock boots with boot flaps, 1.5" waist belt with 3 belt loops sewn (inside) and sealed. Storage bag included. *Also available with Wide-View lens system.*



**Tychem® TK 620 Level A Encapsulated Suit**

Flat back front entry vapor-protective suit (Level A), sealed seam on outside, 48" zipper, double storm flap with Velcro®, 40 mil PVC faceshield, butyl gloves, 2 Pirelli® valves, attached sock boots with boot flaps, 1.5" waist belt with 3 belt loops sewn (inside) and sealed. Storage bag included.

**Tychem® TK495 Encapsulated Training Suit**

Encapsulated training suit, sealed seams for extra strength, front entry, expanded back, 20 mil PVC faceshield, butyl gloves, attached sock boots with boot flaps. Available in rear entry also, style number TK490.



**Nylon Encapsulated Training Suit Style 95494**

This suit is constructed of nylon and is put together with sewn seams...a very low-cost alternative for the training environment. Suit has rear entry, expanded back, 20 mil PVC faceshield, single storm flap, butyl gloves, 2 exhaust ports and attached sock boots. Available in front entry configuration also, style number 95493.



## TRAINING SUITS

**S**taying safe in a hazmat environment relies upon your equipment and training. These Lakeland training suits offer an economical way to learn the do's and don'ts of hazmat procedures without using expensive certified encapsulated suits. **Warning! These suits are for training use only. They are not vapor proof and do not offer any protection in Level A or Level B hazmat environments.**

## Tychem® TK Level B. There is none better!

**L**evel B garments made from DuPont Tychem® TK material have the same great properties of their Level A brothers. Lakeland makes the entire lineup with sealed seams, which provides you with maximum protection. When you wear Lakeland Tychem® TK garments, there is none better.

**1-800-645-9291**  
**www.lakeland.com**



### Tychem® TK100 Coverall

Coverall, collar, open wrists and ankles. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



### Tychem® TK110 Coverall

Coverall, collar, elastic wrists and ankles. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



### Tychem® TK115 Coverall

Coverall, collar, elastic wrists and overboots, 5" storm flap. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



### Tychem® TK120 Level B Coverall

Coverall, hood, elastic face, open wrists and ankles. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



### Tychem® TK130 Level B Coverall

Coverall, hood, elastic face, wrists and ankles. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



### Tychem® TK140 Level B Coverall

Coverall, hood, elastic face, open wrists and attached boots. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK150 Level B Coverall**

Coverall, hood, elastic face, elastic wrists, attached boots. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK155 Level B Coverall**

Coverall, expanded back for SCBA, elastic face and wrists, overboots. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK160 Level B Coverall**

Coverall, hood, elastic face, elastic wrists, attached boots with boot flaps. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK165 Level B Coverall**

Coverall, respirator fit hood, double storm flap with Velcro®, elastic face and wrists, attached boots with boot flaps. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



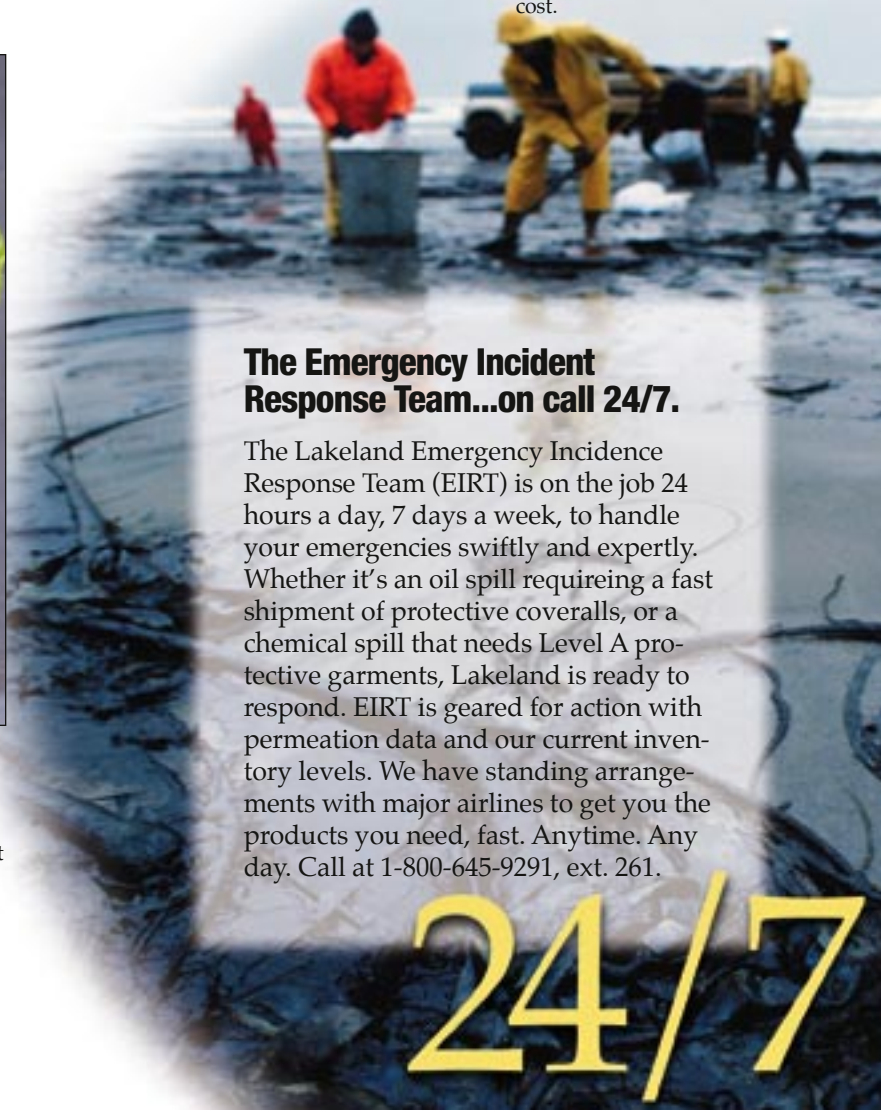
**Tychem® TK166 Level B Coverall**

Coverall, respirator fit hood, double storm flap with Velcro®, elastic face, wrists and ankles. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK170 Level B Coverall**

Coverall, hood, elastic face and wrists with splash guards, sock boots with boot flaps. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**The Emergency Incident Response Team...on call 24/7.**

The Lakeland Emergency Incidence Response Team (EIRT) is on the job 24 hours a day, 7 days a week, to handle your emergencies swiftly and expertly. Whether it's an oil spill requiring a fast shipment of protective coveralls, or a chemical spill that needs Level A protective garments, Lakeland is ready to respond. EIRT is geared for action with permeation data and our current inventory levels. We have standing arrangements with major airlines to get you the products you need, fast. Anytime. Any day. Call at 1-800-645-9291, ext. 261.

**24/7**



**Tychem® TK250 Jacket**

Jacket, collar, zipper, elastic wrists, double storm flap with Velcro®. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK260 Jacket**

Jacket, drawstring hood, zipper, elastic wrists, double storm flap with Velcro®. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK300 Pants**

Pants, elastic waist, hemmed cuffs. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK320 Bib Pants**

Bib pants with suspenders, hemmed cuffs. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK400 Encapsulated Suit**

Encapsulated suit (Level B), rear entry, flat back, 48" zipper, storm flap, 20 mil PVC faceshield, elastic wrists, 1 exhaust port with shroud, air tube inlet, attached sock boots with boot flaps. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost.



**Tychem® TK450 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. Standard sizes are S, M, L, XL. Sizes up to 5XL available at additional cost. Also available as front entry suit, style TK440.



**Tychem® TK730 Apron**

Apron, long sleeves, elastic wrists, Velcro® straps at neck, ties in back. 32" length.



**Tychem® TK735 Bib Apron**

Apron, bib style, knee length, ties at neck and waist. 26" wide x 36" length.



**Tychem® TK710 Hood**

Pullover hood, bell shape, elastic face.



**Tychem® TK714 Hood**

Hood, short bib style, 20 mil PVC lens, 2" Velcro® straps under arms with 4" hook side straps.



**Tychem® TK740 Boot Covers**

Boot covers that extend over calfs, elastic at top.



**Tychem® TK765 Sleeves**

18" sleeves with elastic ends.

**OPTIONS AND ACCESSORIES**



**Pass-Thru Options**

Air supply pass thru's from your favorite manufacturer can be ordered, making air connections fast and easy. Call Lakeland Customer Service for details.

**Option P1**

Scott® pass-thru / Hanson® fittings

**Option P2 (NFPA)**

Scott® pass-thru / Schrader® fittings

**Option P3 (NFPA)**

Standard pass-thru (not NIOSH approved)

**Option P4 (NFPA)**

Survivair® pass-thru / Hanson® fittings

**Option P6**

Draegar® pass-thru / Hanson® fittings

**Option P7**

Draegar® pass-thru / Foster® fittings

**Option P8**

Draegar® pass-thru / Snap-Tite® fittings

**Option P9**

MSA® Dual Purpose® pass-thru with Hanson® fittings

**Option P10**

MSA® Quick Fill® pass-thru

**Option P11**

Interspiro® pass-thru

**Option P13**

North® pass-thru with Snap® fittings

**Option P14**

North® pass-thru with Hanson® fittings

**Option P17**

MSA® Dual Purpose® pass-thru with Foster® fittings



**Quick Disconnect Assembly for Gloves Option G7**

Replacing the gloves on your encapsulated suit is a snap with this quick disconnect assembly. Twist off-twist on action makes for easy removal and installation. Outer replacement assemblies available.



**Seal-tight® Glove System – Option G5**

This pressure fit glove system works with cones to make installation easier than ever. *Note: This option is for Level B use only. Use the Quick Disconnect Option G7 for Level A use.*



**LEVEL A/NFPA 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.

**Part No. 00010 – Level A Test Kit**

**Part No. 00011 – NFPA Test Kit**



**Velcro® Boot Flap Option B1**

Get your boots on and off easier with this Velcro® feature. After donning chemical boots, simply press the Velcro® together and you are ready to roll!



**1-800-645-9291**

**www.lakeland.com**



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**Customer Service**

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Fax: 256-350-0773  
*Chemical Protective Clothing*  
*Woven Clothing*  
*Fyrepel Fire Protective Clothing*  
800-645-9291  
Tel: 256-350-3873  
Fax: 256-350-3011  
E-Mail: [info@lakeland.com](mailto:info@lakeland.com)

*Hand/Arm Protection Division*  
*Customer Service*  
800-886-8010  
Tel: 256-351-9126  
Fax: 256-353-9463

*Lakeland Protective Wear Inc. Canada*  
5109 Harvester Road  
Unit B-7  
Burlington, Ontario L7L5Y9  
800-489-9131 (Canada Only)  
Tel: 905-634-6400  
Fax: 905-634-6611  
Email: [canada@lakeland-ind.com](mailto:canada@lakeland-ind.com)

**Lakeland Customer Service  
and Orders:**

**1-800-645-9291**

**Visit us on the web at  
[www.lakeland.com](http://www.lakeland.com)**