

ChemMax® 1 is constructed with a unique polyethylene barrier film and a continuous filament polypropylene non-woven fabric. ChemMax® 1 garments bar many harmful contaminants from penetrating to inner clothing. Available with serged, bound and sealed seams for scalability.

ChemMax® 1 provides economical, lightweight protection against most industrial acid and base chemicals. Bloodborne pathogen and viral protection make it a cost-effective option for waste water treatment facilities. ChemMax® 1 also meets the requirements of EN-1149 for Electrostatic Properties.

ChemMax® 1 Physical Properties

Property	Test Method	Units	ChemMax® 1
Basis Weight	ASTM D3776	oz./sq. yd	2.29
Grab Tensile MD	- ASTM D5034	pounds	35
Grab Tensile XD	A31101 D3034	pounds	27
Trapezoidal Tear MD	- ASTM D5733	pounds	13.8
Trapezoidal Tear XD	A31101 D3/33	pounds	14.2
Ball Burst	ASTM D751	pounds	25.5

ChemMax® 1 Coveralls



Coverall C1S412Y **Serged Seam** Zipper with storm

flap Sizes: S – 5XL Case Pack: 25



C1S414Y **Serged Seam** C1B414Y **Bound Seam**

- Zipper with storm flap
- Attached hood
- · Attached boots Elastic wrists
 - Sizes: S 5XL Case Pack: 25



Coverall C1S417Y **Serged Seam C1B417Y Bound Seam**

- Zipper with storm flap
- Elastic wrists
- Elastic ankles Sizes: S - 5XL Case Pack: 25



Coverall C1S428Y Serged Seam C1B428Y **Bound Seam**

- Zipper with storm flap
- Attached hood Elastic wrists
- Elastic ankles Sizes: S - 5XL Case Pack: 25



Coverall C1T110Y **Sealed Seam**

- Collar · Storm flap over zipper.
- Elastic wrists
- Elastic ankles Sizes: S – 5XL Case Pack: 6



Coverall C1T130Y **Sealed Seam**

- · Zipper with storm flap
- Elastic face Elastic wrists
- Elastic ankles Sizes: S – 5XL Case Pack: 6



Coverall C1T150Y **Sealed Seam**

- · Zipper with storm flap
- Attached hood
- Elastic wrists Attached boots Sizes: S - 5XL Case Pack: 6



Coverall C1T151Y **Sealed Seam**

- Respirator-fit hood
- · Storm flap over zipper
- Elastic face and wrists
- Attached boots Sizes: S - 5X Case Pack: 6

Permeation Data for ASTM Recommended List of Chemicals for Evaluating Protective Clothing Materials (ASTM F1001)

Challenge Chemical	CAS Number	Physical State	ChemMax® 1	
Acetone	67-64-1	Liquid	imm.	
Acetonitrile	75-05-8	Liquid	imm.	
Ammonia Gas	7664-41-7	Gas	imm.	
1,3-Butadiene Gas	106-99-0	Gas	imm.	
Carbon Disulfide	75-15-0	Liquid	imm.	
Chlorine Gas	7782-50-5	Gas	imm. imm. imm.	
Dichloromethane	75-09-2	Liquid		
Diethylamine	109-89-7	Liquid		
Dimethyl Formamide	68-12-2	Gas	40 minutes imm.	
Ethyl Acetate	141-78-6	Liquid		
Ethylene Oxide Gas	75-21-8	Gas	imm.	
n-Hexane	110-54-3	Liquid Gas	imm. imm. imm.	
Hydrogen Chloride Gas	7647-01-0			
Methanol	67-56-1	Liquid		
Methyl Chloride Gas	74-87-3	Gas	imm.	
Nitrobenzene	98-95-3	Liquid	45 minutes	
Sodium Hydroxide, 50%	1310-73-2	Liquid	320 minutes	
Sulfuric Acid, 96%	7664-93-9	Liquid	315 minutes	
Tetrachloroethylene	127-18-4	Liquid	imm.	
Tetrahydrofuran	109-99-9	Liquid	imm.	
Toluene	108-88-3	Liquid	imm.	

ND = None Detected

> = greater than

L = liquid

G = qas

Numbers reported are averages of samples tested by the ASTM F739 test method. Sample results vary and therefore averages for these results are reported.

Warnings:

- 1. ChemMax® 1 is not flame resistant and should not be used around heat, flame sparks, or in potentially flammable or explosive environments.
- 2. Garments made of ChemMax[®] 1 should have slip resistant or anti-slip materials on the outer surface of boots, shoe covers or other garment surfaces in conditions where slipping could occur.

Note: Chemical Resistance Data is in accordance with ASTM F-739 test method. Testing is performed on fabric samples only, not finished garments. Sources for all test data are independent laboratory conditions and not actual use conditions.

ChemMax® 1 Configurations





- Open backLong sleeve
- Elastic wrists
- Sewn ties Sizes: 30" x 40"

Case Pack: 6



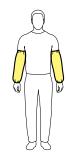
Apron C1S650Y

Sewn ties
 Sizes: 28" x 36"
 Case Pack: 100



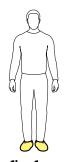
Apron C1B657Y

Long sleeves
 Waist ties
 Sizes: 28" x 53"
 Case Pack: 50



Sleeve C1S850YP-18

Elastic ends
 Sizes: 18" length
 Case Pack: 100 pair



Shoe Cover C1S901YP
• Elastic ankles Sizes: S/M, L/XL, 2X Case Pack: 200 pair



C1S903YP Serged Seam • Elastic top

• 17" high Sizes: S/M, LG/XL, 2X Case Pack: 200 pair

Fentanyl - Testing per ASTM D6978

	Lakeland® Brand	Test Drug and Concentration	Minimum Breakthrough Detection Time (Specimen 1/2/3) (Minutes)	Steady State Permeation Rate (Specimen 1/2/3) (µg/cm2/minute)	Other Observations
CI	hemMax® 1*	Fentanyl Citrate Injection, 100 mcg/2mL	>240	NA	Slight swelling; no degradation

* ChemMax* 1 has >240 min hold out for liquid Fentanyl; Taped/Sealed Seam Garments are recommended for Fentanyl in liquid form

Users should also ensure the gloves they are using for chemotherapy have been tested against the most recent standards. The current standard for exam gloves used in chemotherapy is ASTM D6978-05 "Standard Practice for Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs.

Prior to ASTM D6978-05 many exam gloves were tested against ASTM F739 "Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under Conditions of Continuous Contact". ASTM D6978-05 uses ASTM F739 as a test method, but has a chemical permeation requirement that is 10 times more stringent than what is required by ASTM F739. Users of gloves tested under ASTM D6978-05 have a higher level of confidence that the gloves they are using are tested to the current, more stringent ASTM standard."

