

Zytron 500 Standard Level A Suits

Zytron®
Chemical Protection

Zytron 500

Top Level Protection For Demanding Hazmat Response.

Greater than 8-hour holdout against hundreds of chemicals, with proven holdout against Chemical Warfare Agents (CWA).

- NFPA 1994 Class 2 - 2012 Edition style available.
- Many features and options in a wide variety of encapsulating suits and cover-all styles.
- Available in hi-viz orange and charcoal gray.
- Applications: Hazmat response, chemical handling, refuelling operations, petrochemical operations, hazardous material clean-up and remediation, CWA incineration, remediation and disposal.



ChemScan® labels – quick, accurate and only from Kappler.

Scan the label with your phone's QR reader for a complete list of chemicals tested against your garment's protective fabric.



Special Note: Printed specifications may vary from current source information. Please refer to www.kappler.com for the latest information release

Zytron 500

Style Z5H550

Shown Below

Zytron 500

ASTM F1001 Chemical Test Battery*

Chemical	Minutes
Acetone	>480
Acetonitrile	>480
Carbon Disulfide	>480
Dichloromethane	>480
Diethylamine	>480
Dimethylformamide	>480
Ethyl Acetate	>480
n - Hexane	>480
Methyl Alcohol	>480
Nitrobenzene	>480
Sodium Hydroxide	>480
Sulfuric Acid	>480
Tetrachloroethylene	>480
Tetrahydrofuran	>480
Toluene	>480
Gases	
Ammonia Gas	>480
1,3 Butadiene Gas	>480
Chlorine Gas	>480
Ethylene Oxide Gas	>480
Hydrogen Chloride Gas	>480
Methyl Chloride Gas	>480

Chemical Warfare Agent Data

Chemical Agent	Minutes	Criteria
Bis (2-chloroethyl) sulfide (Mustard:HD)	>480	4.0 ug/cm ²
Isopropyl methylfluorophosphonate (Sarin:GB)	>480	1.25 ug/cm ²
Chlorovinyl arsinedichloride (Lewisite:L)	>480	4.0 ug/cm ²
O-ethyl S-(2-diisopropylaminoethyl) methylphosphonothiolate (Nerve:VX)	>480	1.25 ug/cm ²

* Industrial chemical testing was conducted in accordance with ASTM F 739 with normalized breakthrough times reported in minutes. ** Chemical Warfare Agent testing was conducted in accordance with MIL-STD-282 and/or NFPA 1994-2001 with breakthrough times reported based on total cumulative permeation. For detailed technical data and physical properties visit kappler.com

Caution Temperature service range - 60°C to 93°C established by per-forming tests at high (ASTM D751) & low (ASTM D2136) temperatures. Zytron® fabrics offer little to no thermal heat protection to the user. The temperature range for the fabric & seams is well beyond the temperatures that the human skin can withstand without injury. Permeation testing per ASTM F739 is performed at an ambient temperature of approx. 25°C. Variation of temperature affects the behaviour & aggressiveness of chemicals & may alter the barrier performance of the fabric.

STANDARD LEVEL A SUIT



Large, expanded-view face shield of 40 mil PVC.

Standard styles have single taped seams – seams sewn then hot -air, taped outside only

Easy-to-reach 48" (122 cm) gas-tight PVC zipper, with double storm flap and hook-and-loop closure.

Field replaceable Butyl rubber gloves

ChemTape® 99402YW (not Shown) is an essential accessory for most chemical scenarios

Attached sock boots with boot flaps are standard (excludes gumboots)

Optional Extra AR0B0 Tingley Hazproof Boots.

Important Notes

This garment is designed to be worn as a system in combination with other personal protective equipment, such as boots, & respiratory equipment, please view range of respirators available.

Responsibility Of Users

It is the responsibility of the user to select garments which are appropriate for each intended use and which meet all specified government and industry standards. Zytron® garments are intended to help reduce the potential for injury, but no protective apparel alone, can eliminate all risk of injury. Protective apparel must be used in conjunction with general safety practices. Zytron® garments are designed for limited use. It is the responsibility of the wearer to inspect garments periodically to ensure that all components, including fabric, valves, visors, gloves, zippers, seams, and interfaces are in good working condition, and provide adequate protection for the operation and chemicals to be encountered. Failure to fully inspect garments may result in serious injury or death to the wearer. Never wear garments that have not been fully inspected and in the case of Level A garments, pressure tested prior to use. Any garment which does not pass inspection should be removed from service immediately. Never wear a garment that is contaminated, altered or damaged. If the Zytron® garment is altered, abraded, cut, torn, punctured or otherwise and in any way breached, do not use. The chemical protective garment material has finite resistance to abrasion, cut, tear and puncture. If the Zytron® garment is damaged during use, retreat immediately to a safe environment, thoroughly decontaminate the garment, then dispose of it in a safe manner. It is the responsibility of the garment wearer, and the wearer's supervisor and employer to examine the condition of the garment before and during use to be sure that the garment is suitable for use in that environment by that employee.

Typical Physical Properties Measured per ASTM D751, D3787 and F1358

Test Method	Results - lbs/N
Grab Tensile Strength MD*	120 / 534
Grab Tensile Strength CD*	121 / 538
Tear Resistance Trapezoid Method MD*	35 / 156
Tear Resistance Trapezoid Method CD*	37 / 168
Ball Burst	128 / 569
Flammability Resistance	N/A

*MD: Machine Direction *CD: Cross Direction

WARNING: This information is based on technical data that Kappler believes to be reliable. It is subject to revision as additional knowledge and experience are gained. The website will contain Kappler's most up-to-date product information, and customers who receive pamphlets, brochures or other literature should be aware that such "hard copy" information may not be as current as the information on Kappler's website. www.kappler.com Customers also should recognize that there are uses, environments and chemicals for which Kappler products, garments and/or fabrics are unsuitable. It is the responsibility of the user to review available data and verify that the product, garment and/or fabric is appropriate for the intended use and meets all specified government and/or industry standards. Also, the customer should review all available information on the website to understand the uses – and limitations – on ALL products, garments and fabrics which Kappler makes available.

CAUTION: Do not use for fire protection. Avoid open flame or intense heat.

HazMatch®

Protective Clothing Selection Guide

HazMatch is an easy-to-use online selection tool that provides the data to help you make informed decisions about protective apparel. You can search by chemical or by fabric, with new chemicals constantly being added to the database. Check back often to see the latest available results. And if you have a chemical that does not appear in the database, contact Kappler Customer Service at 1-800-600-4019 for details on our free chemical testing plan.



HazMatch® is an easy-to-use protective apparel selection tool from Kappler that allows a user to choose an appropriate safety garment based on a specific chemical hazard and the exposure scenario. HazMatch also allows a user to save search results to document a Hazard Assessment procedure, which satisfies OSHA requirements for this important procedure.

HazMatch is ideal for emergency responders, industrial hygienists, safety managers or other professionals dealing with hazardous materials.

The app contains a database of tested chemicals, which the user can search by either chemical name or CAS number. Once a chemical is selected, a user completes a short questionnaire on the hazard situation (such as level and length of exposure) and HazMatch will recommend a protective garment that matches the exposure criteria.

In the event that multiple protective garments are suitable for the chemical and hazard scenario, all of the available choices will be listed with the least expensive garment appearing first. Each recommended garment recommendation includes detailed information about that particular style.

HazMatch also may be searched by the different protective fabrics Kappler offers. This search mode provides a list of tested chemicals for a specific fabric and the holdout time for each chemical. All of the chemical data in HazMatch is based on third-party testing, with the database updated regularly with new chemicals.

Note: Sources for all chemical test data are independent laboratories. All tests were performed under laboratory conditions and not under actual use conditions. Tests were performed on material samples, not actual garments. All chemicals tested at 95% and 75° F except Sodium Hydroxide, tested at 50%. MM-0013 / 14KAP096 / 11-14 / 500