

PRODUCT CATALOG

**GUIDE TO ALPHATEC® CHEMICAL
PROTECTIVE APPAREL**

www.ansell.com

Ansell



Protecting workers
in all of their
activities, no matter
where they are or
which industry they
work in. That is
what we do!

TO OUR VALUED CUSTOMERS

Protecting workers in all of their activities, no matter where they are or which industry they work in. That is what we do.

Every day workers in diverse industries around the world put on personal protective solutions. They place their safety in our hands as they rely on Ansell's high-performance products to protect their hands and bodies, preserve their comfort and contribute to their overall well-being.

With over 125 years of experience, we take our customers' trust extremely seriously. Through dedicated R&D, extensive testing and the use of advanced new technologies, we work continuously to enhance the performance and comfort of our product portfolio and ensure that our solutions are performing against the most recent standards and compliant to the new Regulation.

Ansell Guardian®, our proprietary service, helps companies to select the right personal protective equipment solution to improve their safety, productivity and overall business performance.

Our valued customers are driving our leading global position in hand, arm and body protection. We strive to deliver optimal solutions to them that safeguard the health and livelihoods of their workers. A commitment to continuous improvement of products and services enables us to become the preferred supplier in Europe, the Middle East, Africa and beyond.

In this brand-new catalogue we proudly present our full range of chemical, liquid and mechanical protection solutions for hand, arm and body, including over 50 newcomers. The recent simplification of our portfolio around our key brands ActivArmr®, AlphaTec®, EDGE®, HyFlex®, MICROFLEX® and TouchNTuff® will enable you to select the most suited protection solution more easily and is also a testament to the pride we have for our brands.

In addition to this comprehensive product overview, our sales and customer service teams will be delighted to provide expert know-how and advice, explaining how our solutions support to improve your organisations' safety, productivity and cost performance in the best possible way.

Enjoy your journey through our world of protection!

Kind regards,

Rikard Froberg
President IGBU/
CCO EMEA & APAC

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WHY ANSELL?

AlphaTec® Brand
AnsellGUARDIAN®

A WORLD LEADER IN PERSONAL PROTECTION SOLUTIONS

This is how our business works: an overview of Ansell's global sales, products and supply chain infrastructure.



Sell 12 billion+
gloves each year



No. 1 or 2
market share
in most key
segments globally



Ansell solutions
protect more than
10 million
workers each day



Protection solutions
provided to more than
25 specific industries



Average medical professional
personally wears nearly **1,200**
pairs of Ansell gloves

Dedicated to safety

Ansell has been protecting people for over 125 years. We have created specialised teams to focus on the personal protection needs of workers in many industries. Our employees are dedicated to developing solutions that are based on the hazardous conditions that workers face on the job every day.

Ansell is dedicated to worker safety: we provide a comprehensive range of gloves and clothing to meet all worker and product protection requirements.



14,000+
Employees

19 
R&D Innovation Centres



\$2
Billion sales

Map Key

-  Corporate hubs
-  Warehouse/distribution facilities
-  Offices
-  R&D facilities/Centres of Excellence
-  Manufacturing facilities
-  Employees by region (total 14,159)



14
Manufacturing
Facilities

1893



Founded in
Australia

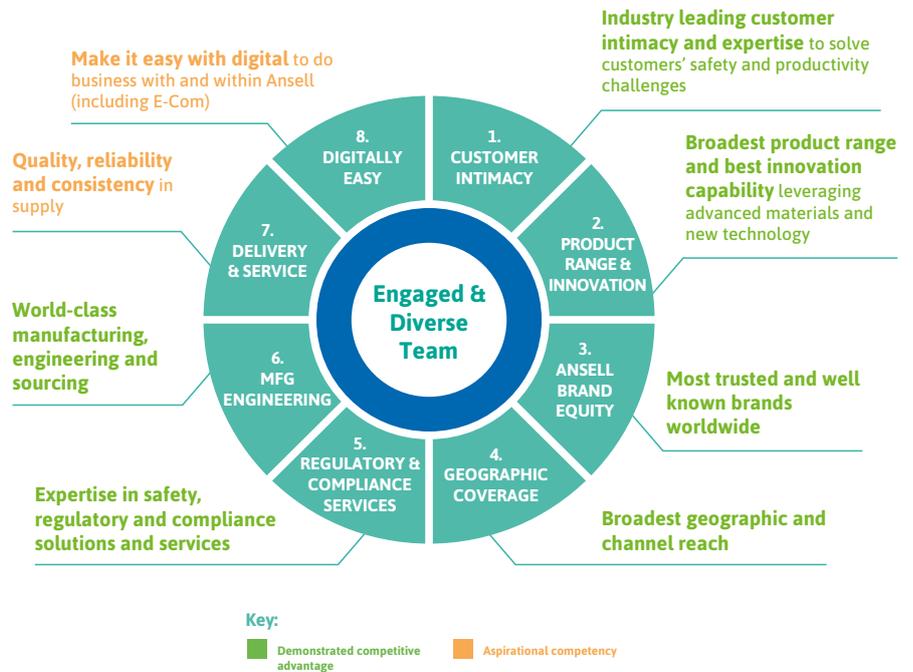
Visit www.ansell.com for more information

WHY ANSELL?

We are innovators striving to create advanced solutions and technology that will solve the problems of workers, creating a safer and more protected world. Our vision is of a world where people enjoy optimal protection against the risks they are exposed to. Whether at work or outside the workplace, people require the right protection for the right situation. After all, what better guarantee is there of increased safety, security and productivity than adequate protection?

8 Dimensions of Differentiation

By leveraging the unique and well defined strengths of Ansell, we deliver better solutions to customers



OUR RESPONSIBLE AND RESPONSIVE STRATEGY & PURPOSE

Our Responsible and Responsive Strategy & Purpose illustrates how we are connecting care for the interests of all stakeholders to our business strategy.

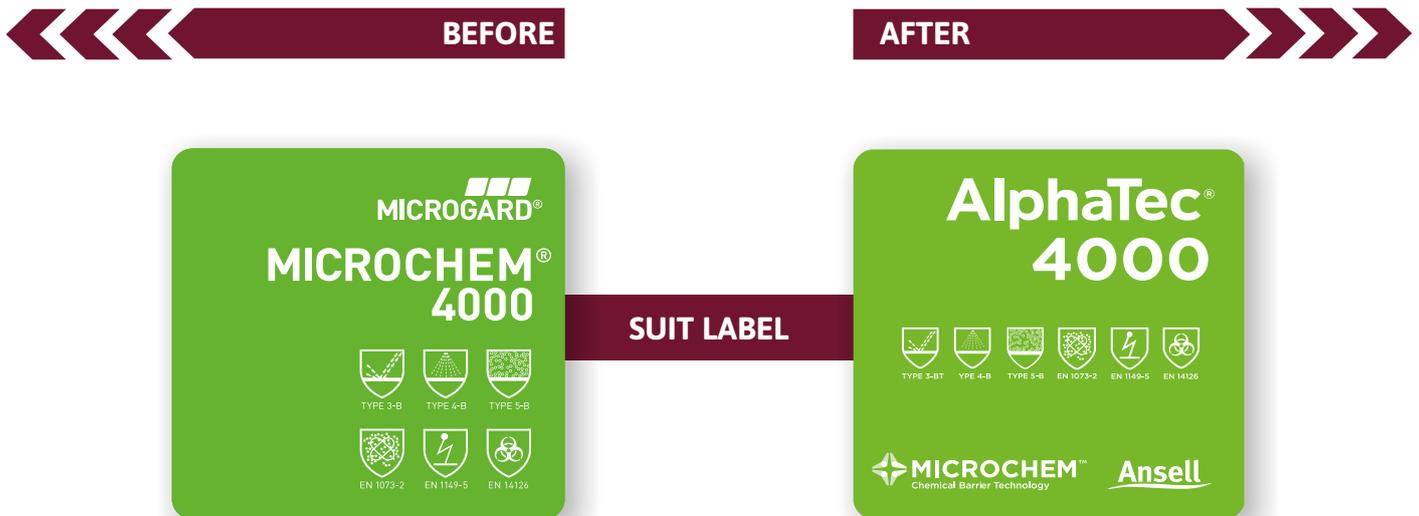
Over the past several years, Ansell has transformed the ways in which we incorporate sustainability into our business practices, and we will continue to advance further in this area in the years ahead.

Better Society	Employees and wider workforce	Community	Business Ethic	<ul style="list-style-type: none"> We care about our people and safety is our top priority We support our communities We play fair and conduct business ethically
	Water	Energy and carbon	Material and waste	<ul style="list-style-type: none"> We use natural resources with care We work to continually lower our GHG emissions We respect the local environment
	Better Environment	Customers	Suppliers	Investors
Better Business				

INNOVATIVE BRAND, UNCHANGED PRODUCTS, QUALITY AND PERFORMANCE

Since the integration of the TRELLECHEM®, MICROCHEM®, MICROGARD® and MICROCHEM® by AlphaTec® brands under the AlphaTec® brand name, we are now able to offer an even more comprehensive portfolio of chemical and multi-hazard protection solutions to our customers. The offer now includes gloves, suits and accessory solutions, with protection against particulates, liquids, gases and biological agents, along with combined chemical and mechanical risks. All existing chemical glove brands will also transition to the AlphaTec® brand.

Our hand and Body Protection portfolios will be transitioning to AlphaTec over the next years. Changes will include: The AlphaTec® brand name on chest labels, neck labels, inner packaging, glove stamps, poly bags and outer cartons.



2019 REGULATORY CHANGES

In response to regulatory changes in 2019, we are pro-actively streamlining the process for specifying and selecting Ansell chemical protective equipment by organising and presenting brands from across our chemical portfolio in a simplified manner under one unique brand, AlphaTec®. This consolidation garners the trust of our customers by making it easier for them to specify and select our products.



AnsellGUARDIAN®

We've learnt a few things over the last 45 years of doing safety assessments. Unlike other PPE manufacturers, we know that every company is different and so is every worker. And all the operations they undertake and safety requirements they have are unique in their own way.

This also means that every AnsellGUARDIAN® assessment is unique. Each of our customers receives a tailor-made safety solution that is backed up by data collected by 600+ safety experts from over 17,000 individual assessments since 2010. **AnsellGUARDIAN® assessments lead to injury reduction, reduced cost to protect, increased compliance as well as PPE portfolio complexity reduction.**

Ansell's global experience, as well as our proprietary software systems and extensive database help us to provide personalised best practice recommendations for our clients. And our in-depth understanding of risk assessment and protection allows us to develop tailor-made solutions, which naturally comply with the ever-changing regulatory standards.

This is how we keep our customers and their employees safe. This is AnsellGUARDIAN®.

WHAT WE DO

Safety & Compliance

We provide a personalised risk management solution that leads to improved worker safety, injury reduction and increased regulatory compliance.

Cost Performance

We advise on business performance improvements that result in lower overall costs for your company.

Productivity

We deliver best practice recommendations to optimise your PPE dispensing, improve your company's output and eliminate waste, leading to an increase in productivity.

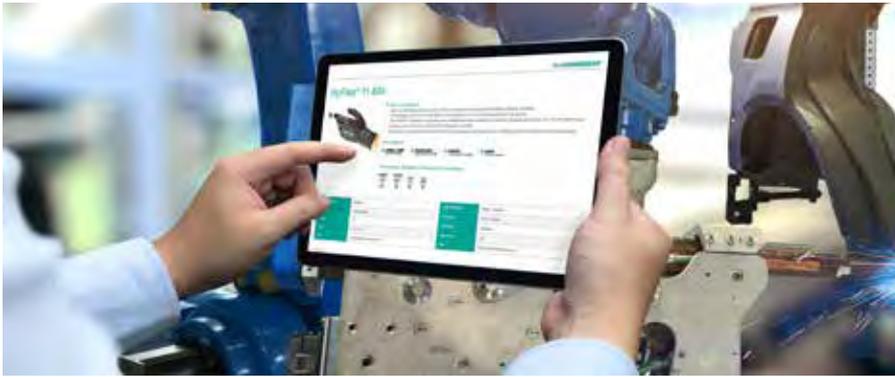


SAFETY. tailor-made

AnsellGUARDIAN®

Performed by our safety experts, AnsellGUARDIAN® is a service that helps our customers to improve their safety, productivity, combining 45 years of safety assessment experience with a data-driven methodology, delivering unique personalised assessments.

HOW WE DO IT



Result oriented

Our simple and clear processes focus on the most relevant areas to deliver our best practices recommendations for one single application or even an entire site.

Tailor-made

Every customer is different, and so are their safety needs. Our 600+ safety experts assess each situation individually, using the data provided and a proven process. This results in a unique, tailor-made assessment to meet your objectives.

Transformational

Our safety experts support the full implementation of our assessment with samples and education of your workers, to ensure the success of PPE change management.

Sustainable partnership

We start our partnership by analysing, benchmarking, implementing and improving your PPE related operations and performance. One assessment at a time, we assess your current and future safety needs.



YOUR BENEFITS

\$170 million

customer savings on PPE since 2010

65%

injury reduction

25%

portfolio reduction

17,000

assessments since 2010

35,000

chemicals profiled to advise what's right

600+

safety experts

45+

years of experience in safety assessments



VIRTUAL ASSESSMENT POSSIBLE

AnsellGUARDIAN® Chemical

CHEMICAL PROTECTION. SIMPLIFIED.

AnsellGUARDIAN® Chemical simplifies the glove and suit selection for your unique set of chemicals.



WHAT WE DO

AnsellGUARDIAN® Chemical evaluates the resistance of glove and suit materials to your chemicals and delivers a personalised assessment with expected permeation breakthrough times and degradation ratings.

This assessment can either be carried out during a personal consultation with our AnsellGUARDIAN® safety expert, or online by using our chemical resistance database (ansellguardianpartner.com). As a result, selecting the right chemical glove and/or suit has never been easier.

HOW WE DO IT

We report permeation breakthrough times –BT1.0 and BT0.1 taken in minutes for the challenged chemical to permeate through the material at a rate of 1.0 µg/ cm²/min or 0.1 µg/ cm²/min as per EN374-3, EN 16523-1, ISO 6529 and ASTM F739. We also report degradation ratings for HP.

Our online solution is designed to simplify your selection of Ansell hand and body protection solutions. It offers an instant visual evaluation and an easy-to-use search functionality, including the unique Chemical Abstracts Service (CAS) number system on ansellguardianpartner.com.

ONLINE SELF SERVICE TO CHEMICAL RESISTANCE DATA



➤ For more information on AnsellGUARDIAN® Partner, please visit ansellguardianpartner.com

North America
US Tel: 800 952 9916
CA Tel: 844 494 7854
Email: insidesalesus@ansell.com

Central & South America
Tel: +52(442) 296 20 50
Email: cslac@ansell.com

Europe, Middle East & Africa
Tel: +32 (0) 2 528 74 00
Email: info@ansell.eu

Asia Pacific
Tel: +603 8310 6688
Email: apac.medical@ansell.com

Australia & New Zealand
Tel: +61 3 9270 7270
Email: protection@ap.ansell.com

Brazil
Tel: +55-11-3356-3100
Email: luvas.medicas@ansell.com

China
Tel: +86(21) 3827 5005
Email: infochina@ansell.com

India
Tel: +91 22 38124500
Email: info.india@ansell.com

Ansell

FURTHER SIMPLIFY THE SELECTION PROCESS

By following our step-by-step guideline, you can easily identify the right suit for your chemical task.

1. Identify the "primary" exposure hazard(s)

Chemical(s)	Particulate contamination	Biological/infective agents
		
• Gas/vapour • Liquids • Solids • Pure or mixtures	• Airborne • Radioactive particulates	• Blood-borne • Airborne/solid

2. Determine the potential for exposure and consequence

and then identify the type or types to be considered.

"Type"	Type 1	Type 3	Type 4	Type 5	Type 6
Exposure level	Gas/vapour	Liquid spray under pressure (jet spray)	Liquid spray (shower/saturation)	Airborne particulates	Light spray/mist

3. Consider the 'secondary' hazard(s)

Heat and flame	Static discharge	Low visibility	Physical demands	Comfort
				

4. Review technical data

Review product technical data in relation to physical, barrier and comfort properties – match to assessment outcomes from stages 1–3.

5. Make your product selection

Identify the correct protection segment and category to find the right protection solutions matched to your safety needs and work environment.

Protection category		Protection segment
	Gas and vapour protection A range of Type 1 and Type 1-ET gas-tight chemical protective suits for hazmat emergency response providing protection from dangerous and toxic liquid and gaseous chemicals.	Limited/single use
		Re-usable
	Ventilated/air-fed protection Our PAPR and AVANT AIRline suit range combines respiratory protection with our exceptional chemical barrier technologies.	Limited/single use
		Re-usable
	Liquid spray and splash protection An extensive range of Type 3 and Type 4 protective suits and partial body accessories utilising our exceptional chemical barrier technologies to provide protection against a wide range of organic and inorganic liquid chemicals, particulates and biohazards.	Limited/single use
		Re-usable
	Particulate or low hazard liquid protection A broad range of lightweight, breathable Type 5 and Type 6 protective suits and partial body accessories providing protection from dry particulates, low-concentration liquid chemicals and biological agents.	Limited/single use
	Chemical flame retardant protection Always to be worn over a thermal FR protective garment, our range of chemical protective suits provides EN ISO 14116 Index 1 limited flame spread protection along with liquid chemicals and particulates.	Limited/single use
	Contaminated water diving protection An extensive portfolio of dry diving suits manufactured from a range of materials which include vulcanised rubber and PU suits which provide class-leading protection for divers in contaminated water.	Re-usable

SIZE CHART GUIDE

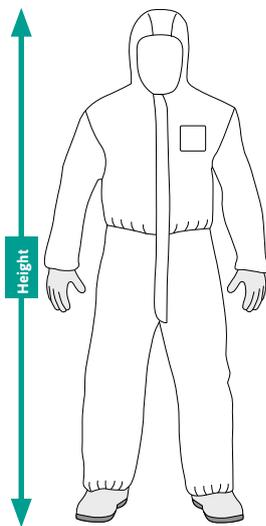
AlphaTec® garments are available in a wide range of sizes to fit most wearers, extreme sizes (XS, 6XL, 7XL) are also available to order, please consult your distributor or contact Ansell for more information.

The measurements shown below relate to the wearer’s body measurements and not the garment measurements.

For any questions, please contact www.ansell.com

Size chart guide below relates to the following product ranges:

AlphaTec® 1500, 1500 PLUS, 1800, 2000, 2300, 2500, 3000, 4000, 5000, 6000, APOLLO, CFR, PAPR product ranges. Includes coveralls, lab coats, jackets and trousers.



WEARER'S BODY MEASUREMENTS		
Size	Weight (in pounds lbs)	Height (in feet ft)
02 = Small	100 - 125	5' - 5'7"
03 = Medium	125 - 160	5'2" - 5'7"
04 = Large	140 - 200	5'5" - 5'10"
05 = XLarge	158 - 220	5'7" - 6'2"
06 = 2XLarge	180 - 240	5'11" - 6'4"
07 = 3XLarge	230 - 260	6'2" - 6'5"
08 = 4XLarge	245 - 300	6'3" - 6'7"
09 = 5XLarge	265 - 320	6'5" - 6'10"

Size chart guide below relates to the following product ranges:

AlphaTec® EVO, FLASH, SUPER, LIGHT, FREEFLOW, TRAINER gas-tight suits

Suit Size	Wearer's Measurements		Sock Size	Boot Size		Glove Size		
	Height (ft)	Weight (lbs)		PVC Boot	Nitrile Rubber Boot	AlphaTec® 38-628 (Viton® Butyl)	AlphaTec® 02-100 (Barrier)	AlphaTec® 08-354 (Neoprene)
S	5'7" - 6'0"	121-165	7.5	8	7.5	10	10	9
M	5'9" - 6'2"	143-187	9.5	10	9.5	10.5	10	9
L	6'0" - 6'4"	165-209	11	12	11	10.5	11	10
XL	6'2" - 6'7"	187-231	11.5	13	12	11	11	10
2XL	6'7" - 6'11"	209-253	13.5	14	13.5	11	11	10
3XL	6'11" - 7'4"	231-276	13.5	14	13.5	11	11	10

Sock/Boot sizes according to US standard. Glove sizes according to EU standard. Glove and boot sizes are fixed by suit size

For VIKING™ Suits please see product pages.

WORKER EXPERIENCE INNOVATION TECHNOLOGIES



WORKER EXPERIENCE INNOVATION TECHNOLOGIES

Over the years, Ansell has made a number of innovations in product design and has become an industry standard. The hallmark of our innovation is to transform global insights into the needs of end users into technology-based solutions to improve the comfort, performance and protection of workers.

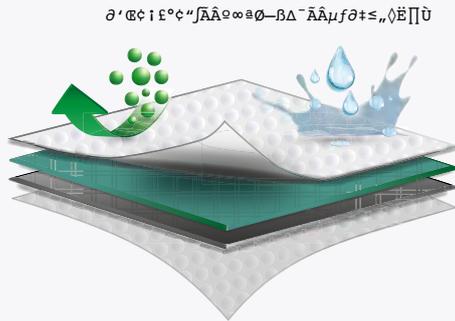
CHEMICAL BARRIER TECHNOLOGY



MICROCHEM™

Chemical Barrier Technology

Chemical Barrier Technology combines polymers in proprietary blends or multi-layer structures specific to their application, providing superior protection to wearers in Chemical, Biological, Radiological and Nuclear (CBRN) environments.*
Multi-layer barrier to particulate, liquid and gaseous chemicals



Gas and vapour



Liquid spray and splash



Particulate or low hazard liquid



FINDING THE RIGHT CHEMICAL BODY PROTECTION SOLUTION

By following our step-by-step guideline, you can easily identify the right suit for your chemical task.

1. Identify the "primary" exposure hazard(s)

Chemical(s)	Particulate contamination	Biological/infective agents
		
• Gas/vapour • Liquids • Solids • Pure or mixtures	• Airborne • Radioactive particulates	• Blood-borne • Airborne/solid

2. Determine the potential for exposure and consequence and then identify the type or types to be considered.

"Type"	Type 1/2	Type 3	Type 4	Type 5	Type 6
Exposure level	Gas/vapour	Liquid spray under pressure (jet spray)	Liquid spray (shower/saturation)	Airborne particulates	Light spray/mist

3. Consider the 'secondary' hazard(s)

Heat and flame	Static discharge	Low visibility	Physical demands	Comfort
				

4. Review technical data

Review product technical data in relation to physical, barrier and comfort properties – match to assessment outcome from stages 1–3.

5. make your product selection

Identify the correct protection segment and category to find the right protection solutions matched to your safety needs and work environment.

Protection type	Protection category	Protection segment
BODY PROTECTION 	 Gas and vapour protection A range of Type 1 and Type 1-ET gas-tight chemical protective suits for hazmat emergency response providing protection from dangerous and toxic liquid and gaseous chemicals.	Limited/single use
		Re-usable
	 Ventilated/air-fed protection Our PAPR, AIRline and AVANT AIRline suit range combines respiratory protection with our exceptional chemical barrier technologies.	Limited/single use
		Re-usable
	 Liquid spray and splash protection An extensive range of Type 3 and Type 4 protective suits and partial body accessories utilising our exceptional chemical barrier technologies to provide protection against a wide range of organic and inorganic liquid chemicals and biohazards.	Limited/single use
		Re-usable
	 Particulate or low hazard liquid protection A broad range of lightweight, breathable Type 5 and Type 6 protective suits and partial body accessories providing protection from dry particulates, low-concentration liquid chemicals and biological agents.	Limited/single use
 Chemical flame retardant protection Always to be worn over a thermal FR protective garment, our range of chemical protective suits provides EN ISO 14116 Index 1 limited flame spread protection along with liquid chemicals and particulates.	Limited/single use	
 Diving protection An extensive portfolio of dry diving suits manufactured from a range of materials which include vulcanised rubber and PU suits which provide class-leading protection for divers in contaminated water.	Re-usable	

GUIDE TO EUROPEAN STANDARDS FOR CHEMICAL PROTECTIVE CLOTHING

To assist you with the selection of appropriate protection solutions based on the exposure risk, the EU developed six types of chemical protective clothing (CPC).

Certification to a particular type offers an indication of your suit's protection against a particular hazard (gas, liquid or dust). As a manufacturer, it is our responsibility to ensure that Ansell meets the requirements of these standards, where applicable. Please be aware that conformance to these type standards does not mean that your suit is 100% impervious to your hazard. Under these tests, suits are only required to meet the minimum performance requirements specified. In the case of the Type 5 particulate test, for example, suits are allowed individual leakages of up to 30%, providing the average for the suits tested is less than 15%. Ansell manufactures products according to ISO 9001, thus ensuring as far as is reasonably possible they consistently achieve the desired protection level.

Current European types of chemical protective clothing		
Symbol*	EN "types"	Definition
	EN 943-1 and 2 Type 1	Gas-tight chemical protective clothing Protective clothing against liquid and gaseous chemicals, aerosols and solid particulates
	Type 1a	› Gas-tight, self-contained breathing apparatus inside the suit
	Type 1a-ET	› Type 1a for emergency teams
	Type 1b	› Gas-tight, self-contained breathing apparatus outside the suit
	Type 1b-ET	› Type 1b for emergency teams
	Type 1c	› Gas-tight, with breathable air supplied via continuous flow airline
	EN 943-1 Type 2	Non-gas-tight chemical protective clothing Suits which retain positive pressure to prevent ingress of dusts, liquids and vapours Note: As of edition 2015 of EN 943-1, Type 2 is no longer specified.
	EN 14605 Type 3	Liquid-tight suits Suits which can protect against strong and directional jets of liquid chemicals
	EN 14605 Type 4	Spray-tight suits Suits which offer protection against saturation of liquid chemicals
	EN ISO 13982-1 Type 5	Dry-particulate protection Suits which provide protection to the full body against airborne solid particulates
	EN 13034 Type 6	Reduced-spray suits Suits which offer limited protection against a light spray of liquid chemicals
Additional standards		
Symbol*	EN "types"	Definition
	EN 1073-1**	Ventilated protective clothing against radioactive particulate contamination
	EN 1073-2**	Non-ventilated protective clothing against radioactive particulate contamination
	EN 14126	Protective clothing against infective agents (Type suffixed with "-B" – i.e. Type 3-B) indicates approval to this European norm
	EN 1149-5	Protective clothing with electrostatic properties***
	EN ISO 27065	Protective clothing – protective suits for operators applying liquid pesticides
	DIN 32781	Protective clothing – protective suits against pesticides
	EN ISO 14116	Protective clothing – limited flame spread materials, material assemblies and clothing
	EN 12941	Respiratory protective devices – powered filtering devices incorporating a helmet or a hood
	EN 14594	Respiratory protective devices – continuous flow compressed airline breathing apparatus

Disclaimer: Ansell garments are available for most applications. However, please note that a detailed assessment of the nature of the hazard and the working environment should be undertaken prior to the selection of appropriate PPE. Ansell provides the information in this product catalogue to assist you with selecting the correct product, but responsibility for the correct choice of PPE remains with the user.

* Type approvals do not necessarily apply to accessories. Always refer to the garment label and instructions-for-use document which will indicate the protection level offered.

** Gives no protection against ionising radiation. *** Always ensure the garment and wearer are properly grounded.

EN 14126 AND ASTM F 1671 STANDARDS OVERVIEW



Protective Clothing against infective agents has two main functions:

- to prevent infective agents from reaching the (possibly injured) skin
- to prevent the spreading of infective agents to other people and other situations, e.g. eating or drinking, when the person has taken their protective clothing off

In many work situations, i.e. microbiological laboratories, the infective agents can be contained and the risk of exposure limited to the occurrence of an accident.

However, in other types of work, i.e. sewage & waste water treatment, caring for infected animals, emergency clean-up; the organisms cannot be contained, exposing the worker continuously to the risk of infection by biological agents. In these situations the biological agents the worker is exposed to may not be known.

Applications where workers can be exposed to biological agents

- Waste water treatment works, sewage systems work
- Agriculture
- Food Industry
- Healthcare, hospitals, emergency services
- Clinical, veterinary laboratories
- Refuse disposal plants
- Activities where there is contact with animals and/or products of animal origin

Micro-organisms are a very heterogeneous group in that they come in all shapes and sizes, and their living conditions, survival abilities etc. vary widely. A distinction is made between four risk groups according to the risk of infection for humans. Details of these risk groups, along with their containment measures are found in European Directive 2000/54/EEC (on the protection of workers from the risk related exposure to biological agents at work).

EN 14126:2003 / ASTM F 1671

Due to the heterogeneity of micro-organisms, it is not possible to define performance criteria of protective clothing on the basis of risk groups, nor on the type of micro-organism. Also it may not be possible to define exactly the organisms the worker is exposed to. Hence the test methods in EN 14126:2003 focus on the medium containing the micro-organism, such as liquid, aerosol or a solid dust particle.

This protective clothing is category III according to the PPE Regulation 2016/425 and required to be subjected to 5 test methods, as specified in the standard EN 14126:2003, below:

- Penetration test using synthetic blood (ISO 16603)
- Resistance to penetration by viruses (ISO 16604)
- Resistance to penetration by bacteria (ISO 22610)
- Resistance to penetration by biologically contaminated aerosols (ISO/DIS 22611)
- Resistance to penetration by contaminated dust (ISO 22612)

The corresponding protective clothing "Type" is then prefixed with the letter "B" (e.g. Type 3-B) and the biohazard symbol is displayed.

One of the critical tests of EN 14126 is the ISO 16604 which is in principle the same test as the ASTM F 1671 as it measures penetration resistance to the same microorganism.

In North America, ASTM F 1671 is the standard to test the resistance of materials used in protective clothing to penetration by blood-borne pathogens. A common misunderstanding among many end-users is that they are protected from blood, body fluids, and other potentially infectious materials (OPIM) when they wear any type of fluidresistant garment or surgical or isolation gown. Only items of clothing and/or accessories featuring ASTM F 1671 are considered impermeable to blood and viral penetration.

EN 14126:2003 Approved Product Range

AlphaTec® Product	Protection against biologically contaminated dust	Protection against biologically contaminated liquids	Tasks	Risk Groups	Risk Group & Task Definition
AlphaTec® 1800 Ts PLUS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A/B	1-2	Risk Group 1. Biological agent unlikely to cause sickness in humans 2. Biological agent that could cause sickness in humans and represent a danger to employees; substance dispersal amongst the population is unlikely; effective preventative measures or treatment is normally possible 3. Biological agent that can cause severe illness in humans and represent a serious risk for employees; a risk of dispersal amongst the population may occur but effective preventive measures or treatment are normally possible 4. Biological agent that causes severe illness in humans and represents a serious risk for employees; the risk of dispersal amongst the population is high under some circumstances; effective preventive measures or treatment are not normally possible. Tasks A. Routine inspection = no contact with contaminated material or objects; B. Handling and disposal of possibly contaminated material, objects or animals; C. Performed tasks require application of cleaning and disinfecting chemicals
AlphaTec® 2000 STANDARD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> *	A/B	1-2	
AlphaTec® 2000 Ts PLUS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A/B	1-3	
AlphaTec® 2300 PLUS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A/B/C	1-4	
AlphaTec® 2500 STANDARD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A/B	1-3	
AlphaTec® 3000, 4000, 5000 MICROCHEM® by AlphaTec® 6000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	B/C	1-4	

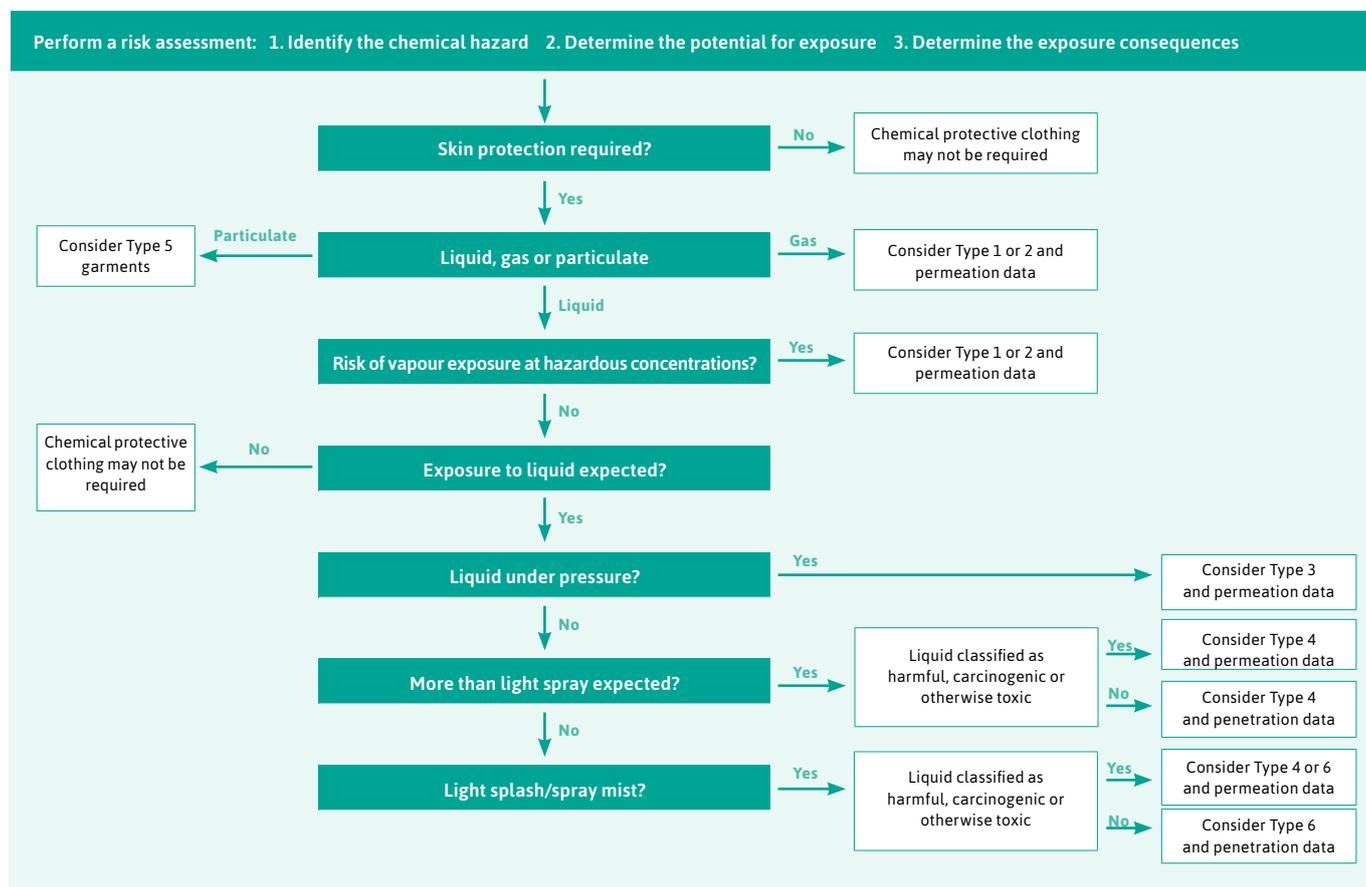
* AlphaTec® 2000 STANDARD includes bound seams which carry a higher risk of liquid ingress under pressure than the taped seams of AlphaTec® 2000 Ts PLUS. Therefore this should be taken into consideration when carrying out a risk assessment for PPE usage to ensure that the right garment is selected and is fit for purpose.

It is the user's responsibility to select an appropriate garment, gloves, boots, and other equipment for the particular use and to understand all warnings and information provided. For further information on AlphaTec® products please visit www.ansell.com

SELECTING THE CORRECT CHEMICAL PROTECTIVE CLOTHING

Ansell has devised this simple flowchart as a basic tool to assist users and health and safety managers in selecting the correct type of chemical protective clothing.

It is important that the suitability of protective clothing for a particular use is determined by a trained expert in occupational health and safety. Many chemicals can cause serious and permanent injury to an unprotected or improperly protected user. Therefore, special emphasis has to be placed on the careful selection of chemical protective clothing when the potential for exposure to such chemicals has been identified.



Factors to consider

Advice on the suitability of chemical protective clothing for a task is very often based on reported permeation breakthrough times. The standard test methods used for measuring the breakthrough time (i.e. EN 16523, ISO 6529, ASTM F 739) are often regarded as representing the “worst-case scenario”, since the chemical is held in direct contact with the barrier material. Intermittent contact or splashes of the chemical, in real life, may in fact lengthen the breakthrough time. Also, laboratory-generated chemical permeation data may not always reflect conditions in the workplace. Temperature, pressure, flexing etc. could all potentially have an impact on the breakthrough time. When choosing chemical protective clothing, consideration has to be given to permeation and penetration, and the physical performance attributes of the product (abrasion, tear, tensile, strength etc.). Other physical properties to consider are the strength of seams and closures (i.e. zips) as well as flexibility, weight and comfort factors (i.e. thermal insulation, breathability etc.). The best chemically resistant material will be ineffective if torn, cut, punctured or otherwise damaged.

Important note: This guide is simplified and as such the suitability of chemical protective clothing for a particular use should only be determined by a trained expert in occupational health and safety. It is the responsibility of the user to assess the types of hazards and the risks associated with exposure and to verify the information provided for the product to make a final decision on the appropriate personal protective equipment needed for their specific circumstance.

CHEMICAL PENETRATION BREAKTHROUGH TIMES

The standardised penetration breakthrough time in the table below is evaluated based on a series of standard test methods such as EN 16523-1 and ISO 6529.

In the colored cells on the right, the data marked with the symbol C are the experimental results of external authoritative laboratories, the data marked with the symbol V are the experimental results of the internal certification laboratory, and the remaining colored cells without specific data indicate estimates

BRAND			Non-Gastight		Non-Gastight		Non-Gastight		Non-Gastight		Gastight	
			AlphaTec® 2300		AlphaTec® 3000		AlphaTec® 4000		AlphaTec® 5000		MICROCHEM® 6000	
CAS	CHEMICAL NAME	%										
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	100										
110-85-0	1,4-Diazacyclohexane	100										
108-65-6	1-Methoxy-2-Propylacetate	100										
64-19-7	Acetic acid	100	5'	V	>480'	V	>480'	C	>480'	V		
67-64-1	Acetone	100	<1'	C	28'	C	>480'	C	>480'	C	>480'	C
75-05-8	Acetonitrile	100			<6'	C	>480'	C	>480'	C	>480'	C
79-10-7	Acrylic acid	100			>480'	C	>480'	C				
107-13-1	Acrylonitrile	100					>480'	C				
107-18-6	Allyl alcohol	100			>480'	C	>480'	C				
7664-41-7	Ammonia, gas	100			3'	C	>480'	C	>480'	C	>480'	C
1336-21-6	Ammonium hydroxide	25			>480'	C						
71-43-2	Benzene	100			2'	C	>480'	C	>480'	C	>480'	C
98-88-4	Benzoyl chloride	100										
80-05-7	Bisphenol A	100										
590-92-1	Bromopropionic acid	100										
111-76-2	Butylglycol	100										
75-15-0	Carbon Disulfide	100			<1'	C	2'	C	>480'	C	>480'	C
56-23-5	Carbon tetrachloride	100										
67-66-3	Chloroform	100			<1'	C	11'	C	101'	C		
8007-45-2	Coal tar	100	>240'	V	>240'	V	>480'	C				
108-93-0	Cyclohexanol	100										
108-94-1	Cyclohexanone	100										
84-74-2	Dibutylphthalate	100										
75-09-2	Dichloromethane	100			0'	C	5'	V	59'	C	>480'	C
68334-30-5	Diesel LS	100			15'	C	>480'	C				
109-89-7	Diethylamine	100			0'	C	2'	C	>480'	C	>480'	C
110-85-0	Piperazine	100										
68-12-2	Dimethylformamide	100			>480'	C	>480'	C	>480'	C	>480'	C
67-68-5	Dimethyl Sulfoxide	100					>480'	C				
64742-47-8	Distillate (petroleum), hydrotreated light	100										
64-17-5	Ethanol	50					>480'	C				
141-43-5	Ethanolamine	100			>480'	C	>480'	C				
110-80-5	Ethyl Glycol	100										
141-78-6	Ethyl acetate	100			3'	C	>480'	C	>480'	C	>480'	C
64-17-5	Ethyl alcohol	96										
64-17-5	Ethyl alcohol	50										
111-15-9	Ethyl glycol ethyl ether acetate	100										
107-21-1	Ethylene Glycol	100			>480'	C	>480'	C				
50-00-0	Formaldehyde	37			>480'	C	>480'	C				
64-18-6	Formic acid	98			>480'	C						
96-48-0	Gamma-Butyrolactone	100										
8006-61-9	Gasoline	100			2'	C	>480'	C				
111-30-8	Glutaraldehyde, 50%	50										
142-82-5	Heptane	100			0'	C	480'	C	>480'	C	>480'	C
999-97-3	Hexamethyldisilazane	100					480'	C				
7647-01-0	Hydrochloric acid	37	94'	V	>480'	C	480'	C				
7664-39-3	Hydrofluoric Acid	49	>480'	C	>480'	C						
7722-84-1	Hydrogen peroxide	30										
540-84-1	Isooctane	100										
78-59-1	Isophorone	100										
67-63-0	Isopropanol	70	>480'	C	>480'	C	>480'	C				

BRAND			Non-Gastight		Non-Gastight		Non-Gastight		Non-Gastight		Gastight		
			AlphaTec® 2300		AlphaTec® 3000		AlphaTec® 4000		AlphaTec® 5000		MICROCHEM® 6000		
CAS	CHEMICAL NAME	%											
67-63-0	Isopropanol	100											
67-56-1	Methyl Alcohol	100	>480'	C	>480'	C	>480'	C	>480'	C	>480'	C	
108-10-1	Methyl Isobutyl Ketone	100											
96-33-3	Methyl acrylate	100											
78-93-3	Methyl ethyl ketone	100				>480'	C	>480'	C				
80-62-6	Methyl methacrylate	100				>480'	C						
1634-04-4	Methyl tert-Butyl Ether	100		1'	C	>480'	C						
74-89-5	Methylamine, 40% aqueous solution	40											
8012-95-1	Mineral oil	100											
872-50-4	N-Methyl-2-pyrrolidone	100		>480'	C	>480'	C						
8030-30-6	Naphtha	100											
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	100											
64742-49-0	Naphtha, petroleum, hydrotreated light	100											
7697-37-2	Nitric acid	70	254'	V	>480'	C	>480'	C			>480'	V	
7697-37-2	Nitric acid	65											
98-95-3	Nitrobenzene	100		>480'	C	>480'	C	>480'	C	>480'	C	>480'	C
111-87-5	Octyl alcohol	100											
144-62-7	Oxalic acid, saturated solution	10		>480'	C								
79-21-0	Peracetic acid	39											
108-95-2	Phenol, aqueous solution	90		>480'	C	>480'	C	>480'	C	>480'	C		
108-90-7	Phenyl chloride	100				>480'	C	>480'	C				
7664-38-2	Phosphoric acid	85		>480'	C	>480'	C						
107-12-0	Propionitrile	100				>480'	C						
57-55-6	Propylene Glycol	100											
107-98-2	Propylene Glycol-1-methylether	100											
110-86-1	Pyridine	100		17'	C	>469'	C	>480'	C				
1310-73-2	Sodium Hydroxide	100											
1310-73-2	Sodium Hydroxide	50	>480'	C	>480'	C	>480'	C	>480'	C	>480'	C	
7681-52-9	Sodium Hypochlorite, aqueous solution	15	>480'	C	>480'	C	>480'	C	480'	C			
8052-41-3	Stoddard solvent	100											
100-42-5	Styrene	100		1'	C	303'	C	>480'	C				
7664-93-9	Sulfuric acid	50	>480'	C	>480'	C	>480'	C					
7664-93-9	Sulfuric acid	96	>480'	C	>480'	C	>480'	C	>480'	C	>480'	C	
7664-93-9	Sulfuric acid	99				>480'	C						
127-18-4	Tetrachloroethylene	100				>480'	C	>480'	C	>480'	C	>480'	C
109-99-9	Tetrahydrofuran	100		<1'	C	4'	C	>480'	C	>480'	C	>480'	C
7719-09-7	Thionyl chloride	100		<1'	C	2'	C	17'	C	18'	C		
108-88-3	Toluene	100		<1'	C	>480'	C	>480'	C	>480'	C	>480'	C
79-01-6	Trichloroethylene	100		2'	C	7'	C	>480'	C				
102-71-6	Triethanolamine	100											
121-44-8	Triethylamine	100		<1'	C	5'	C	>480'	C				
64742-88-7	White spirit	100											
1330-20-7	Xylene, isomeric mixture	100											
71-36-3	n-Butanol	100	>480'		>480'	C	>480'	C					
110-54-3	n-Hexane	100		0'	C	>480'	C	>480'	C	>480'	C	>480'	C
71-23-8	n-Propanol	100	>480'										
109-60-4	n-Propyl acetate	100											
1120-21-4	n-Undecane	100		3'	V								
123-86-4	n-butyl acetate	100											

Permeation Barrier Performance

No Barrier	Splash/Limited Barrier	Medium Barrier	Good Barrier
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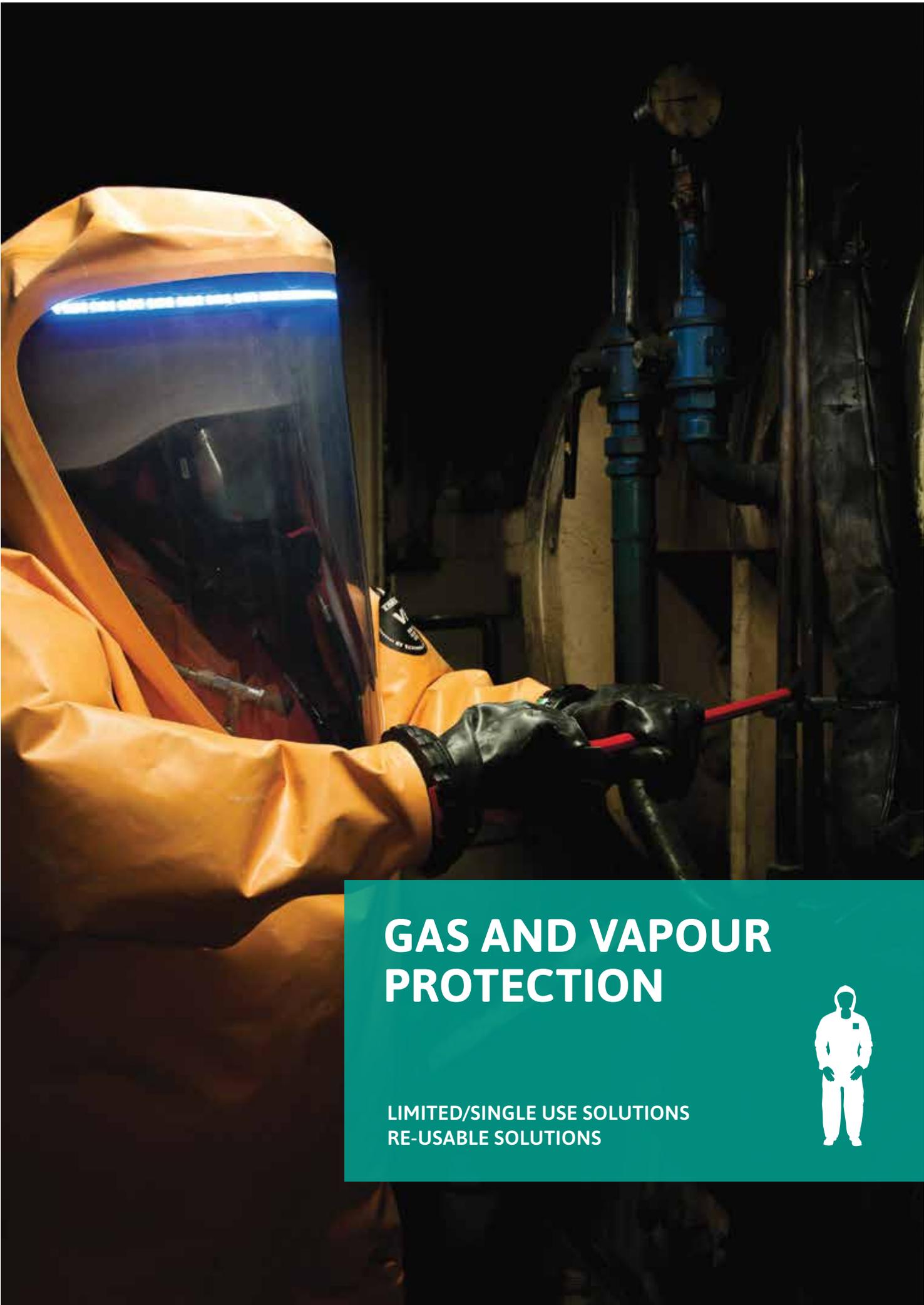
Important note: The penetration time cannot be used to determine the wearing time of a protective suit after it is contaminated. It needs to be judged comprehensively based on factors such as substance permeability, toxicity and exposure conditions. The safe wearing time of protective clothing may be shorter or longer than the penetration time.

Disclaimer: The chemical permeation data may change from the date of printing of the manual. For the most updated and accurate information, please refer to the Chemical Guardian website (<https://www.ansellguardianpartner.com/chemical/>)*

BODY PROTECTION SOLUTIONS

Brand	Style	Model/type	Page
GAS AND VAPOUR PROTECTION			
Limited/single use			
MICROCHEM®	6000	Models - Socks or Attached Boots	22
Re-usable			
AlphaTec®	EVO	CV, VP1, T	23
AlphaTec®	FLASH	CV, VP1, T	25
AlphaTec®	VPS	CV, VP1, T	27
AlphaTec®	Super	CV, VP1, T	29
AlphaTec®	Light	CV, VP1, T	31
AlphaTec®	Hands-Free Visor Light System		33
AlphaTec®	Trainer	CV, VP1, T	33
AlphaTec®	SCBA Cover		33
VENTILATED/AIR-FED PROTECTION			
Limited/single use			
AlphaTec®	5000	AVANT AIRline Hood	35
MICROGARD®/ MICROCHEM®	2500, 3000, 4000	PAPR, AIRline	36
MICROGARD®/ MICROCHEM®	3000, 4000	AVANT AIRline, AVANT ₂ AIRline	36
Re-usable			
AlphaTec®	Super	Freeflow	37
AlphaTec®	Light	Freeflow	37
AlphaTec®	Freeflow Hood Super	V/B	37
AlphaTec®	Freeflow Hood Light	PVC	37
LIQUID SPRAY AND SPLASH PROTECTION			
Limited/single use			
AlphaTec®	2300 PLUS	132	39
AlphaTec®	Glove Connector	070	39
AlphaTec®	3000	103, 111, 121, 122, 162	41
AlphaTec®	3000	201, 213, 214, 301, 400, 406, 507, 508, 600	42
AlphaTec®	4000	103, 111, 121, 122, 125, 162	44
AlphaTec®	4000 APOLLO	126	45
AlphaTec®	4000	151	45
AlphaTec®	4000	212, 215, 230, 301, 406, 507, 516, 600	46
AlphaTec®	5000	103, 111, 121 - G02, 122, 125-G02	48
AlphaTec®	5000 APOLLO	186	49
AlphaTec®	5000	151	49
AlphaTec®	ACT	Type T/Level B	50
Re-usable			
AlphaTec®	66-300	111, 111-G09, 122, 122-G09, 122W-G09	51
AlphaTec®	66-310	111	52
AlphaTec®	66-320	146, 151/156	52
Ansell®	56-100	PVC-45G	<?>
Ansell®	56-101	PVC-45W	<?>

Brand	Style	Model/type	Page
Ansell®	67-221	BC-21W	53
Ansell®	64-569	SC-36BCPE/SC-41BCPE	53
PARTICULATE OR LOW HAZARD LIQUID PROTECTION			
Limited/single use			
AlphaTec®	1500	138, 113	55
AlphaTec®	1500 PLUS	111	55
AlphaTec®	1600 PLUS	111	57
AlphaTec®	1800 STANDARD	111	57
AlphaTec®	1800 Ts PLUS	103, 111, 122, 156	57
AlphaTec®	1800 COMFORT	195	58
AlphaTec®	2000 STANDARD	103, 111, 113, 122, 156, 162	60
AlphaTec®	2000 COMFORT	129	61
AlphaTec®	2000 SOCO	128	61
AlphaTec®	2000 Ts PLUS	103, 111, 122, 128, 156	62
AlphaTec®	2000	209, 213, 214, 219, 301, 400, 401, 406, 407, 503, 507, 600	63
AlphaTec®	2300	103, 111, 122, 156	67
AlphaTec®	2300 COMFORT	129	65
AlphaTec®	2500 STANDARD	111, 122	67
AlphaTec®	2500 PLUS	111, 122	67
AlphaTec®	2500	203, 213, 400, 406, 407, 409, 503, 507, 600	71
CHEMICAL FLAME RETARDANT PROTECTION			
Limited/single use			
AlphaTec®	1500 PLUS FR	111	70
AlphaTec®	FR	111	70
AlphaTec®	CFR	111	71
DIVING PROTECTION			
Re-usable			
VIKING™		PRO	73
VIKING™		PROTECH II	74
VIKING™		HD	74
VIKING™		HDS	75
VIKING™		HAZTECH	75
VIKING™		VSN	76
VIKING™		VTS	76
VIKING™		WRS	77
VIKING™		Hot Water Suit	77
VIKING™		XT500	78
VIKING™	Commercial Overboots		78
VIKING™	Neoprene semi-dry gloves		78



GAS AND VAPOUR PROTECTION

LIMITED/SINGLE USE SOLUTIONS
RE-USABLE SOLUTIONS





MICROCHEM® 6000

MODELS - SOCKS OR ATTACHED BOOTS



MICROCHEM® 6000 is a Type 1a gas-tight suit. The lightweight, flexible and yet incredibly strong material provides an excellent barrier to numerous hazardous chemicals, including chemical warfare agents. This highly visible innovative material is strong, durable and meets or exceeds the minimum requirements for EN 943-1 and EN 943-2 limited-use suits.

DESCRIPTION

- **DYNAT/YKK gas-tight zip** – Provides protection and performance in the most hostile of chemical environments. The zip has an outer zip flap made of the same materials as the suit
- Two MICROCHEM® exhalation valves fitted in the hood
- **Visor** – Provides a wide field of vision with free head movement and enough headroom for use with a safety helmet
- **SCBA pass-thru device optional** – For connection to second-man attachment or switch-over device
- **Attached socks with boot overflaps** – Must be worn with a suitable wellington boot
- Ultrasonically welded and taped seams

GLOVE OPTIONS

- **GA1:** Permanently attached Ansell Barrier® gloves + neoprene outer glove
- **G02:** Permanently attached Ansell Barrier® gloves with sleeve over-cuffs – an overglove should be worn to provide mechanical strength

IDEAL APPLICATIONS

- Petrochemicals
- Industrial and tank cleaning
- Sewage purification installations
- Health service
- Nuclear industry

INDUSTRIES



PERFORMANCE RATINGS



SIZES

S-3XL

COLOURS

MATERIALS

Multi-layer barrier laminate

FEATURES



Semi-rigid visor



DYNAT/YKK gas-tight zip



Exhalation valves



AlphaTec® EVO
(ex. TRELLECHEM®)

TYPE CV



Top-of-the-range hazmat suit providing excellent protection against the most aggressive chemicals in liquid, vapour, gaseous and solid form, including warfare agents. Fully certified to the American standard NFPA 1991:2016, including the optional chemical flash fire and liquefied gas protection requirements.

DESCRIPTION

- An “all-inclusive” encapsulating hazmat suit, SCBA worn inside
- Chemical-resistant Viton® rubber top coating
- Outstanding permeation times – tested for 24 hours
- Aramid base fabric
- Wide-vision, rigid and impact-resistant visor
- Flash fire-resistant
- Option of sewn-in socks or attached boots
- Suit ventilation as standard, airline passthrough as option

IDEAL APPLICATIONS

- Chemical Handling
- Emergency Teams
- Industrial and Tank Cleaning
- Law Enforcement
- Petrochemicals
- Shipping

INDUSTRIES



PERFORMANCE RATINGS

- NFPA 1991:2016
- EN 943-1 and EN 943-2/ET
- Approved for use in explosive environments, Zones 0, 1, 2/20, 21, 22, Group IIA, IIB, IIC according to ATEX Directive 94/9/EC



EN 1149-5:
This applies
only to the suit
material.

SIZES

2XS-3XL

COLOURS

SEAM TYPE

Stitched with glued-on tape outside and welded-on barrier tape inside

MATERIALS

Aramid fabric coated on outside with butyl and Viton® rubber and on inside laminated to a multi-layer barrier film

FEATURES



Visor



Hump



Bayonet glove ring system



AlphaTec® EVO
(ex. TRELLECHEM®)

TYPE VP1



DESCRIPTION

- An “all-inclusive” encapsulating hazmat suit, SCBA worn inside
- Chemical-resistant Viton® rubber top coating
- Outstanding permeation times – tested for 24 hours
- Aramid base fabric
- Extra large, wide-vision, rigid and impact-resistant visor
- Flash fire-resistant
- Option of sewn-in socks or attached boots
- Suit ventilation as standard, airline passthrough as option
- Certified to EN 943-1, EN 943-2/ET and NFPA 1991:2016
- Approved for use in explosive environments, Zones 0, 1, 2/20, 21, 22, Group IIA, IIB, IIC according to ATEX Directive 94/9/EC

IDEAL APPLICATIONS

- Hazmat response and CBRN
- Chemical emergencies and hot zone

INDUSTRIES



PERFORMANCE RATINGS



EN 1149-5: This applies only to the suit material.

SIZES

2XS-3XL

COLOURS



SEAM TYPE

Stitched with glued-on tape outside and welded-on barrier tape inside

MATERIALS

Aramid fabric coated on outside with butyl and Viton® rubber and on inside laminated to a multi-layer barrier film

AlphaTec® EVO
(ex. TRELLECHEM®)

TYPE T



DESCRIPTION

- A non-encapsulating top-level hazmat suit, SCBA worn outside
- Chemical resistant Viton® rubber top coating
- Outstanding permeation times – tested for 24 hours
- Aramid base fabric
- 3D face seal for optimal fit with a full-face mask
- High flame resistance
- Optional with attached mask and option of sewn-in socks or attached boots
- Suit ventilation as standard
- Approved for use in explosive environments, Zones 0, 1, 2/20, 21, 22, Group IIA, IIB, IIC according to ATEX Directive 94/9/EC
- Certified to EN 943-1 and EN 943-2/ET

IDEAL APPLICATIONS

- Hazmat response and CBRN
- Chemical emergencies and hot zone
- Work in confined space

INDUSTRIES



PERFORMANCE RATINGS



EN 1149-5: This applies only to the suit material.

SIZES

2XS-3XL

COLOURS



SEAM TYPE

Stitched with glued-on tape outside and welded-on barrier tape inside

MATERIALS

Aramid fabric coated on outside with butyl and Viton® rubber and on inside laminated to a multi-layer barrier film



AlphaTec® FLASH
(ex. TRELLECHEM® VPS Flash)

TYPE CV



High-performance hazmat suit which provides excellent protection against hazardous chemicals in liquid, vapour, gaseous and solid form, including warfare agents.

DESCRIPTION

- Encapsulating hazmat suit with SCBA worn inside
- Excellent permeation times in combination with a high degree of flame resistance
- Wide-vision, rigid and impact-resistant visor
- Option of sewn-in socks or attached boots
- Suit ventilation as standard, airline passthrough as option
- Fully certified to the American standard NFPA 1991:2016, including the optional chemical flash fire and liquefied gas protection requirements

IDEAL APPLICATIONS

- Hazmat response
- CBRN
- Chemical emergencies
- Hot zone

INDUSTRIES



PERFORMANCE RATINGS

- NFPA 1991:2016
- EN 943-1 and EN 943-2/ET
- Approved for use in explosive environments, Zones 2/21, 22 only and Group IIA, according to ATEX Directive 94/9/EC



EN 1149-5:
This applies only to the suit material.

SIZES

2XS-3XL

COLOURS  

SEAM TYPE

Stitched with glued-on tape outside and welded-on barrier tape inside

MATERIALS

Aramid fabric coated on outside with chloroprene rubber and on inside laminated to a multi-layer barrier film

FEATURES



Visor



Bayonet glove ring system



Sock model with separate boots



AlphaTec® FLASH
(ex. TRELLECHEM® VPS Flash)

TYPE VP1



DESCRIPTION

- Encapsulating hazmat suit with SCBA worn inside
- Excellent permeation times in combination with a high degree of flame resistance
- Extra large, wide-vision, rigid and impact-resistant visor
- Option of sewn-in socks or attached boots
- Suit ventilation as standard, airline passthrough as option
- Fully certified to the American standard NFPA 1991:2016, including the optional chemical flash fire and liquefied gas protection requirements
- Certified to EN 943-1, EN 943-2/ET and NFPA 1991:2016
- Approved for use in explosive environments, Zones 2 / 21, 22 only and Group IIA, according to ATEX Directive 94/9/EC

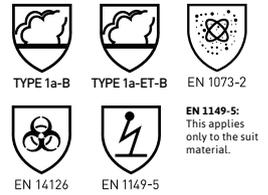
IDEAL APPLICATIONS

- Hazmat response and CBRN
- Chemical emergencies and hot zone

INDUSTRIES



PERFORMANCE RATINGS



SIZES

2XS-3XL

COLOURS



SEAM TYPE

Stitched with glued-on tape outside and welded-on barrier tape inside

MATERIALS

Aramid fabric coated on outside with chloroprene rubber and on inside laminated to a multi-layer barrier film

AlphaTec® FLASH
(ex. TRELLECHEM® VPS Flash)

TYPE T



DESCRIPTION

- A non-encapsulating hazmat suit with SCBA worn outside
- Excellent permeation times in combination with a high degree of flame resistance
- 3D face seal for optimal fit with a full-face mask
- Optional with attached mask and option of sewn-in socks or attached boots
- Approved for use in explosive environments, Zones 2/21, 22 only and Group IIA, according to ATEX Directive 94/9/EC
- Suit ventilation as standard
- Certified to EN 943-1 and EN 943-2/ET

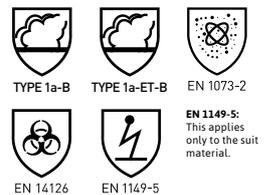
IDEAL APPLICATIONS

- Hazmat response and CBRN
- Chemical emergencies and hot zone
- Work in confined space

INDUSTRIES



PERFORMANCE RATINGS



SIZES

2XS-3XL

COLOURS



SEAM TYPE

Stitched with glued-on tape outside and welded-on barrier tape inside

MATERIALS

Aramid fabric coated on outside with chloroprene rubber and on inside laminated to a multi-layer barrier film



AlphaTec® VPS
(ex. TRELLECHEM®)

TYPE CV



Versatile and durable suit with excellent protection against hazardous chemicals in liquid, vapour, gaseous and solid form, including warfare agents.

DESCRIPTION

- An all-round encapsulating suit (SCBA worn inside) for different user needs
- Excellent permeation times
- Wide-vision, rigid and impact-resistant visor
- Option of sewn-in socks or attached boots
- Suit ventilation as standard, airline passthrough as option

IDEAL APPLICATIONS

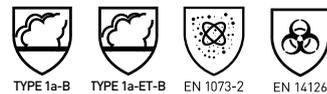
- Chemical emergencies
- Cleaning and maintenance
- CBRN

INDUSTRIES



PERFORMANCE RATINGS

- EN 943-1 and EN 943-2/ET



SIZES

2XS-3XL

COLOURS  

SEAM TYPE

Stitched with glued-on tape outside and welded-on barrier tape inside

MATERIALS

Polyamide (nylon) fabric coated on outside with chloroprene rubber and on inside laminated to a multi-layer barrier film

FEATURES



Valve



Hump



Bayonet glove ring system



AlphaTec® VPS
(ex. TRELLECHEM®)

TYPE VP1



DESCRIPTION

- An all-round encapsulating suit (SCBA worn inside) for different user needs
- Excellent permeation times
- Extra large, wide-vision, rigid and impact-resistant visor
- Option of sewn-in socks or attached boots
- Suit ventilation as standard, airline passthrough as option
- Certified to EN 943-1 and EN 943-2/ET

IDEAL APPLICATIONS

- Chemical emergencies
- Cleaning and maintenance
- CBRN

INDUSTRIES



PERFORMANCE RATINGS



SIZES

2XS-3XL

COLOURS



SEAM TYPE

Stitched with glued-on tape outside and welded-on barrier tape inside

MATERIALS

Polyamide (nylon) fabric coated on outside with chloroprene rubber and on inside laminated to a multi-layer barrier film

AlphaTec® VPS
(ex. TRELLECHEM®)

TYPE T



DESCRIPTION

- An all-round non-encapsulating suit (SCBA worn outside) for different user needs
- Excellent permeation times
- 3D face seal for optimal fit with a full-face mask
- Optional with attached mask and option of sewn-in socks or attached boots
- Suit ventilation as standard
- Certified to EN 943-1 and EN 943-2/ET
- SOLAS approved

IDEAL APPLICATIONS

- Chemical emergencies
- Cleaning and maintenance
- CBRN
- Work in confined spaces

INDUSTRIES



PERFORMANCE RATINGS



SIZES

2XS-3XL

COLOURS



SEAM TYPE

Stitched with glued-on tape outside and welded-on barrier tape inside

MATERIALS

Polyamide (nylon) fabric coated on outside with chloroprene rubber and on inside laminated to a multi-layer barrier film



AlphaTec® Super
(ex. TRELLECHEM®)

TYPE CV



The true workhorse of the AlphaTec® gas-tight suit range. Highly chemical-resistant and durable yet soft and flexible and with an outstanding performance record. Suitable for use in a wide range of applications.

DESCRIPTION

- Encapsulating suit design with SCBA worn on the inside
- Viton® rubber top coating provides high degradation resistance and durability
- Long permeation times
- Wide-vision, rigid and impact-resistant visor
- Extremely durable, yet soft and flexible
- Option of sewn-in sock or attached boots
- Suit ventilation as standard, airline passthrough as option

IDEAL APPLICATIONS

- Chemical emergencies
- Cleaning and maintenance
- Solvents, acids (including HF), alkali

INDUSTRIES



PERFORMANCE RATINGS

- EN 943-1 and EN 943-2/ET
- Approved for use in explosive environments, Zones 0, 1, 2/20, 21, 22, Group IIA, IIB, IIC according to ATEX Directive 94/9/EC



EN 1149-5
This applies only to the suit material.

SIZES

2XS-3XL

COLOURS

SEAM TYPE

Double-stitched seams with glued-on tapes inside and outside

MATERIALS

Highly durable Viton®/butyl rubber-coated polyamide (nylon) fabric

FEATURES



Visor



Bayonet glove ring system



Attached boots



AlphaTec® Super
(ex. TRELLECHEM®)

TYPE VP1



DESCRIPTION

- Encapsulating suit design with SCBA worn on the inside
- Viton® rubber top coating provides high degradation resistance and durability
- Long permeation times
- Extra large, wide-vision, rigid and impact-resistant visor
- Extremely durable, yet soft and flexible
- Option of sewn-in sock or attached boots
- Suit ventilation as standard, airline passthrough as option
- Certified to EN 943-1 and EN 943-2/ET
- Approved for use in explosive environments, Zones 0, 1, 2/20, 21, 22, Group IIA, IIB, IIC according to ATEX Directive 94/9/EC

IDEAL APPLICATIONS

- Chemical emergencies
- Cleaning and maintenance
- Solvents, acids (including HF), alkali

INDUSTRIES



PERFORMANCE RATINGS



SIZES

2XS-3XL

COLOURS



SEAM TYPE

Double-stitched seams with glued-on tapes inside and outside

MATERIALS

Highly durable Viton®/butyl rubber-coated polyamide (nylon) fabric

AlphaTec® Super
(ex. TRELLECHEM®)

TYPE T



DESCRIPTION

- A non-encapsulating suit design with SCBA worn on the outside
- Viton® rubber top coating provides high degradation resistance and durability
- Long permeation times
- 3D face seal or optimal fit with a full-face mask
- Extremely durable, yet soft and flexible
- Optional with attached mask and option of sewn-in socks or attached boots
- Suit ventilation as standard
- Certified to EN 943-1 and EN 943-2/ET
- Approved for use in explosive environments, Zones 0, 1, 2/20, 21, 22, Group IIA, IIB, IIC according to ATEX Directive 94/9/EC
- SOLAS approved

IDEAL APPLICATIONS

- Chemical emergencies
- Cleaning and maintenance
- Solvents, acids (including HF), alkali
- Work in confined spaces

INDUSTRIES



PERFORMANCE RATINGS



SIZES

2XS-3XL

COLOURS



SEAM TYPE

Double-stitched seams with glued-on tapes inside and outside

MATERIALS

Highly durable Viton®/butyl rubber-coated polyamide (nylon) fabric



AlphaTec® Light
(ex. TRELLECHEM®)

TYPE CV



Re-usable gas-tight suit intended for industrial use and ideal against alkalis, acids and cooling media, e.g. ammonia.

DESCRIPTION

- Encapsulating suit design with SCBA worn on the inside
- Soft, flexible and durable suit material
- Protects very well against alkalis and acids
- Wide-vision, rigid and impact-resistant visor
- Option of sewn-in socks or attached boots
- Suit ventilation as standard, airline passthrough as option
- Durable

IDEAL APPLICATIONS

- Cleaning and maintenance
- Alkali (ammonia) and acids (low-medium concentration)

INDUSTRIES



PERFORMANCE RATINGS

- EN 943-1



EN 1149-5:
This applies only to the suit material.

SIZES

2XS-3XL

COLOURS

SEAM TYPE

Double-stitched seams with a welded-on tape on outside

MATERIALS

Polyamide (nylon) fabric coated on both sides with PVC

FEATURES



Visor



Valve



Bayonet glove ring system



AlphaTec® Light
(ex. TRELLECHEM®)

TYPE VP1



DESCRIPTION

- Encapsulating suit design with SCBA worn on the inside
- Soft, flexible and durable suit material
- Protects very well against alkalis and acids
- Extra large, wide vision rigid and impact-resistant visor
- Suit ventilation as standard, airline passthrough as option
- Option of sewn-in sock or attached boots
- Durable
- Certified to EN 943-1

IDEAL APPLICATIONS

- Cleaning and maintenance
- Alkali (ammonia) and acids (low-medium concentration)

INDUSTRIES



PERFORMANCE RATINGS



TYPE 1a-B EN 1073-2 EN 14126



EN 1149-5: This applies only to the suit material.

EN 1149-5

SIZES

2XS-3XL

COLOURS



SEAM TYPE

Double-stitched seams with a welded-on tape on outside

MATERIALS

Polyamide (nylon) fabric coated on both sides with PVC

AlphaTec® Light
(ex. TRELLECHEM®)

TYPE T



DESCRIPTION

- A non-encapsulating suit design with SCBA worn on the outside
- Soft, flexible and durable suit material
- Protects very well against alkalis and acids
- 3D face seal for optimal fit with a full-face mask
- Optional with attached mask and option of sewn-in socks or attached boots
- Suit ventilation as standard
- Durable
- SOLAS approved
- Certified to EN 943-1

IDEAL APPLICATIONS

- Cleaning and maintenance
- Alkali (ammonia) and acids (low-medium concentration)
- Work in confined spaces

INDUSTRIES



PERFORMANCE RATINGS



TYPE 1a-B EN 1073-2 EN 14126



EN 1149-5: This applies only to the suit material.

EN 1149-5

SIZES

2XS-3XL

COLOURS



SEAM TYPE

Double-stitched seams with a welded-on tape on outside

MATERIALS

Polyamide (nylon) fabric coated on both sides with PVC



AlphaTec® Hands-Free Visor Light System
(ex. TRELLECHEM®)



DESCRIPTION

- Panoramic lighting with LED lights – spreads the light over a wide area, avoiding blinding reflections
- Lightweight and slim design - minimal interference with movement and other equipment
- Powered by a standard 9V battery
- Fits in AlphaTec® gas-tight suits of encapsulating design (Level A) and can easily be retrofitted

IDEAL APPLICATIONS

- Chemical emergencies
- CBRN
- Cleaning and maintenance

INDUSTRIES



PERFORMANCE RATINGS

EMC Directive 2004/108/EC

MODELS: CV and VP1

AlphaTec® Trainer
(ex. TRELLECHEM® Treltrain)



DESCRIPTION

- Available in the same designs as the operational AlphaTec® suit (type CV, VP1 and T)
- Encapsulating designs are available with rigid or soft visor, standard size (CV) or large (VP1)
- Saves the operational suits until they are really needed
- Strong and durable watertight PVC-coated zip

IDEAL APPLICATIONS

- For training and teaching purpose only (not certified)

INDUSTRIES



SIZES

2XS-3XL

COLOURS



AlphaTec® SCBA Cover
(ex. TRELLECHEM® TC Hood)



DESCRIPTION

- Liquid splash protection for the SCBA on type T/ non-encapsulating suits
- Double coated PVC on nylon fabric i.e. TL material
- Non-certified accessory

IDEAL APPLICATIONS

- Chemical emergencies
- Cleaning and maintenance

INDUSTRIES



SIZES

One size

COLOURS





VENTILATED/ AIR-FED PROTECTION

LIMITED/SINGLE USE SOLUTIONS
RE-USABLE SOLUTIONS





AlphaTec® 5000
(ex. MICROCHEM®)

AVANT AIRline Hood



The AlphaTec® 5000 AVANT AIRline continuous flow air-fed Hood for protection against hazardous liquids and particulates.

DESCRIPTION

- **Protection** – Exceptional chemical permeation resistance against a wide range of organic and inorganic chemicals
- **Comfort** – Ultra-lightweight hood fitted with an attached adjustable air flow regulator providing 150 – 300 litres per minute at a working pressure of 3.5 – 5.5 bar
- **Panoramic visor** – Design with 180-degree view
- **Highly visible** – Bright orange colour for increased worker safety
- **AlphaTec® valve** – Built-in flow control and low-flow alarm unit

(patent pending)

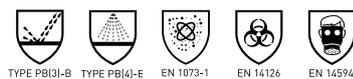
IDEAL APPLICATIONS

- Chemical handling/spills
- Hazardous waste disposal
- Industrial tank cleaning
- Maintenance
- Petrochemical plant applications

INDUSTRIES



PERFORMANCE RATINGS



TYPE PB(3)-B TYPE PB(4)-E EN 1073-1 EN 14126 EN 14594

EN 1073-1: hood tested for inward leakage to EN 1073-1:2016, limited to Clause 4.3 Nominal Protection Factor Class 5 in the breathing zone only.

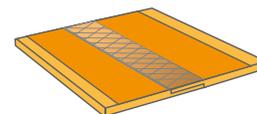
SIZES

One size

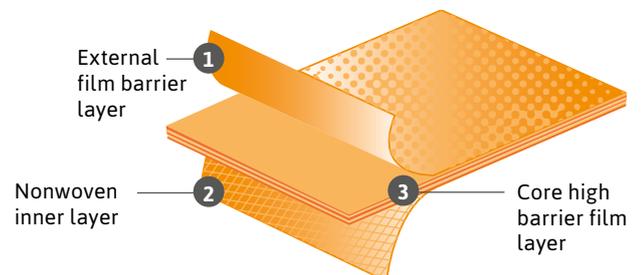
COLOURS



ULTRASONICALLY WELDED & TAPED SEAMS



MATERIALS



FEATURES



AlphaTec® flow-control valve and low-flow alarm unit



180-degree visor



**MICROGARD®/MICROCHEM®/
ALPHATEC®**

PAPR & AVANT AIRLINE



PAPR



AVANT AIRline

Features Products	Panoramic visor design	Emergency rip-cord	Internal air distribution channel	Low-flow warning whistle	Attached glove options	Attached boots with anti-slip sole	Socks with boot-flaps	Fabric
PAPR	✓	✓	-	✓	-	Model 705	Model 700 Model 701 Model 704	2500
								3000
								4000
AVANT AIRline	✓	✓	✓	✓	✓	Model 754	Model 755	3000
								4000

FABRIC TECHNOLOGIES



A unique material offering exceptional mechanical strength, liquid and particulate protection.



The durable multi-layer fabric provides an extremely effective barrier against both inorganic chemicals and biological hazards.

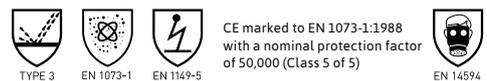


An exceptional barrier against many concentrated organic and inorganic chemicals as well as biological agents.

PERFORMANCE RATINGS



PAPR



AIRline, AVANT AIRline

Note: Type 3 applies to MICROCHEM® 3000 and 4000 versions only.



AlphaTec® Super
(ex. TRELLECHEM®)

Freeflow



DESCRIPTION

- Viton® rubber top coating provides high-degradation resistance and durability
- Encapsulating design without hump
- Swiveling airline passthrough equipped with a warning whistle, which sounds if the pressure drops too low
- Working pressure 3-8 bars
- Extremely durable, yet soft and flexible

IDEAL APPLICATIONS

- Cleaning and maintenance
- Solvents, acids (including HF), alkali

INDUSTRIES



PERFORMANCE RATINGS

Approved for use in explosive environments, Zones 0, 1, 2/20, 21, 22, Group IIA, IIB, IIC according to ATEX Directive 94/9/EC



SIZES

2XS-3XL

COLOURS



SEAM TYPE

Double-stitched seams with glued-on tapes inside and outside

MATERIALS

Highly durable Viton®/butyl rubber-coated polyamide (nylon) fabric

AlphaTec® Light
(ex. TRELLECHEM®)

Freeflow



DESCRIPTION

- Strong and flexible PVC-coated fabric
- Encapsulating design without hump
- Swiveling airline passthrough equipped with a warning whistle, which sounds if the pressure drops too low
- Working pressure 3-8 bars
- Durable

IDEAL APPLICATIONS

- Cleaning and maintenance
- Alkali (ammonia) and acids (low to medium concentration)

INDUSTRIES



PERFORMANCE RATINGS



SIZES

2XS-3XL

COLOURS

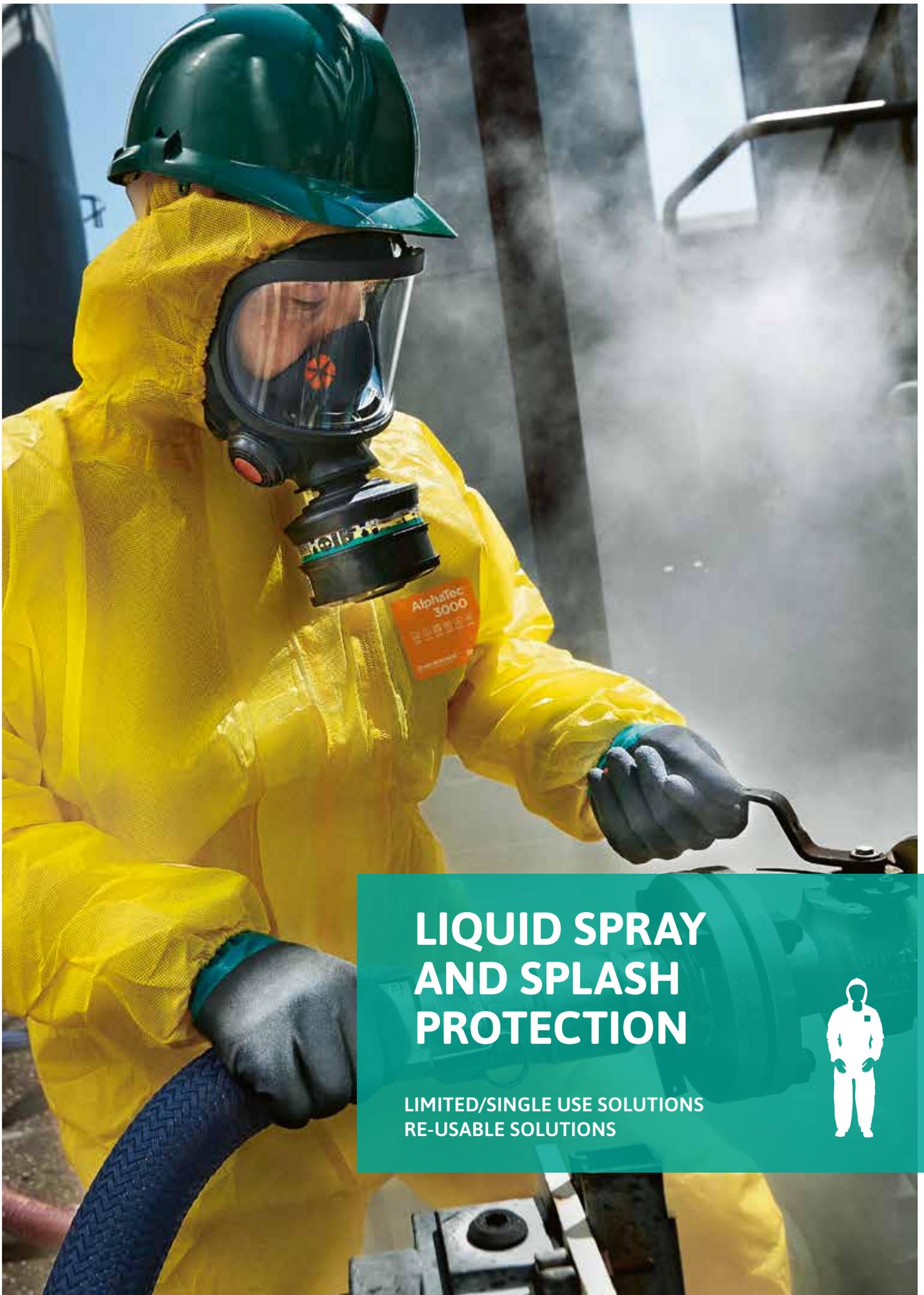


SEAM TYPE

Double-stitched seams with a welded-on outside tape

MATERIALS

Polyamide (nylon) fabric coated on both sides with PVC



LIQUID SPRAY AND SPLASH PROTECTION

LIMITED/SINGLE USE SOLUTIONS
RE-USABLE SOLUTIONS



AlphaTec® 2300 PLUS
(ex. MICROGARD®)

MODEL 132



DESCRIPTION

- **Protection** – Polycoated bi-component barrier resists permeation of numerous liquid chemicals
- **Highly visible** – Bright yellow colour for improved worker safety
- **Comfort** – Lightweight yet relatively strong and durable
- **Anti-static** – Tested according to EN 1149-5
- **Designed to protect** – Typical coverall features include respirator fit hood and a zip flap with self-adhesive tape closure
- 3-piece hood
- Elasticated hood, wrists, waist and ankles
- 2-way front zip with resealable storm flap
- Finger loops

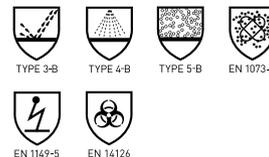
IDEAL APPLICATIONS

- Environmental cleanup
- Sewage purification installations
- Industrial and chemical manufacturing
- Industrial cleaning

INDUSTRIES



PERFORMANCE RATINGS



SIZES

S-5XL

COLOURS



STITCHED & TAPED SEAMS



AlphaTec® Glove Connector

MODEL 070



DESCRIPTION

- Innovative design utilising the latest polymer technology
- Creates a liquid-tight seal between glove and cuff
- Consistent and reliable alternative to taping
- Quick and easy fit – improves productivity
- Works with a wide variety of chemical glove thicknesses
- Ribbed cone and collar for secure attachment
- AlphaTec® – advanced chemical protection
- Tested in accordance with ISO 17491-3:2008 – determination of resistance to penetration by a jet of liquid (jet test)

(patent pending)

IDEAL APPLICATIONS

- Caustic clean-downs
- Chemical handling/transportation
- Industrial tank cleaning
- Paint spraying
- Sewage purification inspections
- Solvent degreasing and parts cleaning

INDUSTRIES



AlphaTec® 3000
(ex. MICROCHEM®)



AlphaTec® 3000 is one of the lightest and most comfortable chemical protective materials on the market today. This durable multi-layer fabric provides an extremely effective barrier against both inorganic chemicals and biological hazards.

DESCRIPTION

- **Protection** – Multi-layer barrier fabric effective against numerous chemicals
- **Highly visible** – Bright yellow colour for improved worker safety
- **Comfort** – Lightweight yet durable
- **Anti-static** – Tested according to EN 1149-5
- **Designed to protect** – Typical coverall features include dual zip systems and double cuffs

IDEAL APPLICATIONS

- Chemicals
- Oil and petrochemicals
- Pharmaceutical
- Food industry (caustic clean-downs)
- Sewage purification installations
- Industrial and tank cleaning
- Mining

INDUSTRIES



PERFORMANCE RATINGS



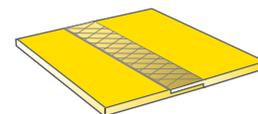
TECHNOLOGIES



COLOURS



ULTRASONICALLY WELDED SEAMS



FEATURES

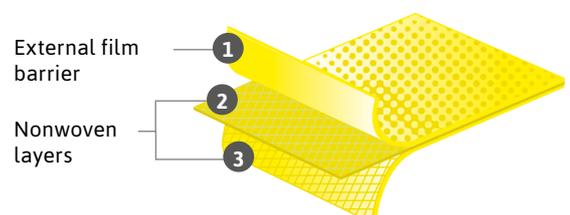


Double zip system



Double cuff design

MATERIALS





AlphaTec® 3000
(ex. MICROCHEM®) **COVERALL MODELS**

MODEL 103



SIZES
S-5XL

COLOURS


- Collar
- Double zip closure
- Double cuffs
- Elasticated waist, double cuffs and ankles

MODEL 111/132



SIZES
S-5XL

COLOURS


- 2-piece hood
- Double zip closure
- Double cuffs
- Elasticated hood, waist, double cuffs and ankles

MODEL 121

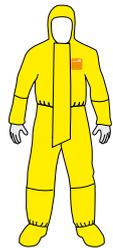


SIZES
S-5XL

COLOURS


- 2-piece hood
- Double zip closure
- Elasticated hood, waist, ankles and sleeve over cuffs
- Attached AlphaTec® 02-100 gloves.

MODEL 122



SIZES
S-5XL

COLOURS


- 2-piece hood
- Double zip closure
- Elasticated hood, double cuffs and waist
- Integrated socks with boot overlap

MODEL 162



SIZES
S-5XL

COLOURS


- Pass-thru device for use with fall arrest equipment
- 2-piece hood
- Double zip closure
- Double cuffs
- Elasticated hood, waist, double cuffs and ankles
- Ultrasonically welded and taped seams



MODEL 201 **JACKET**



- 2-piece hood
- Single zip closure
- Elasticated hood, wrists and hem
- Welded seams



SIZES: S-3XL

COLOURS ■

MODEL 406 **OVERBOOTS**



- Elastic to top of boot
- Tie fastening
- Welded seams
- Category I

SIZES: One size (fits size 42-46)

COLOURS ■

MODEL 600 **OVERSLEEVES**



- Elasticated at both ends
- Welded seams
- Category I

SIZES: One size

COLOURS ■

MODEL 213 **APRON**



- Tie fastening to waist
- 100 cm long
- Tie fastening



SIZES: One size

COLOURS ■

MODEL 507 **HOOD**



- Balaclava-style cape hood covering part of shoulders
- Velcro fastening to front
- Welded seams
- Category I

SIZES: One size

COLOURS ■

MODEL 214 **APRON WITH SLEEVES**



- Rear VELCRO® fastening
- Elasticated wrists
- Welded seams
- 100 cm long



SIZES: S-3XL

COLOURS ■

MODEL 508 **CAPE HOOD WITH VISOR**



- Balaclava-style cape hood covering part of shoulders
- Welded seams
- Visor to face opening
- Category I

SIZES: One size

COLOURS ■

AlphaTec® 4000
(ex. MICROCHEM®)



AlphaTec® 4000 is designed to provide an exceptional barrier against many concentrated organic and inorganic chemicals as well as biological agents.

DESCRIPTION

- **Protection** – Permeation tested against over 190 chemicals, including chemical warfare agents
- **Comfort** – Textile-like inner improves wearer acceptance
- **Anti-static** – Tested according to EN 1149-5
- **Designed to protect** – Typical coverall features include dual zip systems and double cuffs

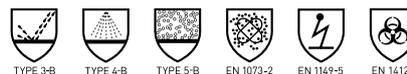
IDEAL APPLICATIONS

- Chemical handling/transportation
- Oil-based mud protection
- Hazardous waste remediation
- Sewage purification installations
- Industrial/tank cleaning
- Hazmat emergency response (i.e. Level B)
- Pharmaceutical
- Mining
- Agriculture

INDUSTRIES



PERFORMANCE RATINGS



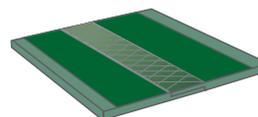
TECHNOLOGIES



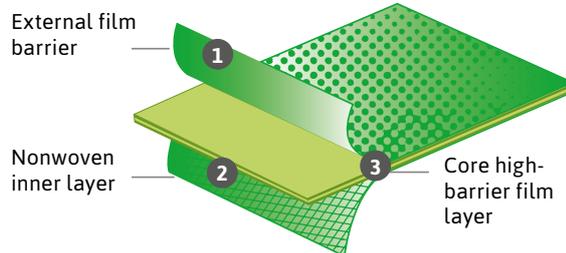
COLOURS



ULTRASONICALLY WELDED & TAPED SEAMS



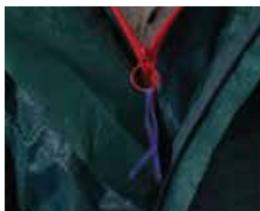
MATERIALS



FEATURES



2-piece hood



Double zip system

AlphaTec® 4000
(ex. MICROCHEM®)

COVERALL MODELS

MODEL 103



SIZES
S-5XL

COLOURS



- Collar
- Double zip closure
- Double cuffs with knitted inner cuff
- Elasticated outer cuffs, waist and ankles

MODEL 111



SIZES
S-5XL

COLOURS



- 2-piece hood
- Double zip closure
- Double cuffs with knitted inner cuff
- Elasticated hood, outer cuffs, waist and ankles

MODEL 121



SIZES
S-5XL

COLOURS



- 2-piece hood
- Double cuffs
- Double zip closure
- Elasticated hood, waist and ankles
- Attached AlphaTec® 02-100 gloves

MODEL 122



SIZES
S-5XL

COLOURS



- 2-piece hood
- Double zip closure
- Double cuffs with knitted inner cuff
- Elasticated hood, outer cuffs, waist and boot overflaps
- Integrated socks with boot overflaps

MODEL 125



SIZES
S-5XL

COLOURS



- 2-piece hood
- Double cuffs
- Double zip closure
- Elasticated hood, waist and boot overflaps
- Integrated socks with boot overflaps
- Attached AlphaTec® 02-100 gloves

MODEL 162



SIZES
S-5XL

COLOURS



- Pass-thru device for use with fall arrest equipment
- 2-piece hood
- Double zip closure
- Double cuffs with knitted inner cuff
- Elasticated hood, outer cuffs, waist and ankles



AlphaTec® 4000 APOLLO
(ex. MICROCHEM®)

MODEL 126



DESCRIPTION

- Rear entry double zip system
- Rear mounted BA (breathing apparatus) pouch – universal fit with most BA
- Attached socks with boot overlap
- Attached AlphaTech® 02-100 gloves
- Exhalation valves
- Clear face visor
- Batwing design enables air gauge checking within the suit
- Adjustable internal support braces

IDEAL APPLICATIONS

- Chemicals
- Oil and petrochemicals
- Pharmaceutical
- Agriculture
- Sewage purification installations
- Industrial and tank cleaning
- Emergency services (HAZMAT, CBRN)

INDUSTRIES



PERFORMANCE RATINGS



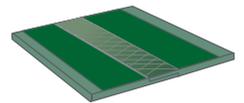
SIZES

M-2XL

COLOURS



ULTRASONICALLY WELDED & TAPED SEAMS



AlphaTec® 4000
(ex. MICROCHEM®)

MODEL 151



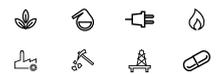
DESCRIPTION

- Neoprene rubber face seal
- Rear horizontal zip entry
- Attached socks with boot overlap
- Ultrasonically welded and taped seams
- Includes attached AlphaTech® 02-100 gloves with oversleeves and finger loops

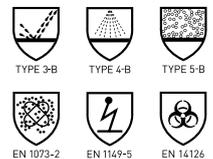
IDEAL APPLICATIONS

- Chemicals
- Oil and petrochemicals
- Pharmaceutical
- Agriculture
- Sewage purification installations
- Industrial and tank cleaning
- Emergency services (HAZMAT, CBRN)

INDUSTRIES



PERFORMANCE RATINGS



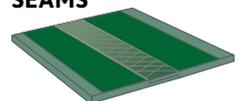
SIZES

S-5XL

COLOURS



ULTRASONICALLY WELDED & TAPED SEAMS

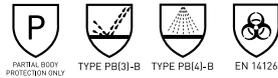


MODEL 212

APRON



- Tie fastening to waist
- 100 cm long tie fastening



SIZES: One size

COLOURS ■

MODEL 406

OVERBOOTS



- Elastic to top of boot
- Tie fastening
- Welded seams
- Category I

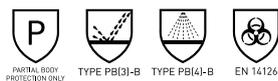
SIZES: One size (fits size 42-46) **COLOURS** ■

MODEL 215

APRON WITH SLEEVES



- VELCRO® fastening to neck
- Tie fastening at the waist
- Double cuff with knitted inner cuff
- Welded and taped seams



SIZES: S-3XL

COLOURS ■

MODEL 507

CAPE HOOD



- Balaclava-style cape hood covering part of shoulders
- VELCRO® fastening to front
- Welded seams
- Category I

SIZES: One size

COLOURS ■

AlphaTec® 5000
(ex. MICROCHEM®)



AlphaTec® 5000 reaches new levels in chemical protection and has been engineered to protect. The highly visible multi-layer fabric is strong, durable and suitable for workers in extremely hazardous areas, including hazmat response teams.

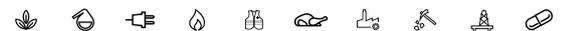
DESCRIPTION

- **Performance** – Barrier to numerous organic and inorganic chemicals and biological hazards
- **Comfort** – Multi-layer material which is lightweight, yet strong and durable
- **Highly visible** – Bright orange colour for improved worker safety
- **Protection** – >480 minutes breakthrough time against 14 of 15 chemicals listed in EN ISO 6529
- **Anti-static** – Tested according to EN 1149-5
- **Designed to protect** – Innovative design features include liquid-tight dual zip designs without the need for additional taping

IDEAL APPLICATIONS

- Chemicals
- Oil and petrochemicals
- Pharmaceuticals
- Mining
- Agriculture
- First response
- Fire service
- Industrial and tank cleaning
- Sewage purification installations

INDUSTRIES



PERFORMANCE RATINGS

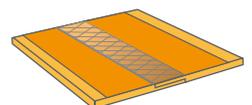


TECHNOLOGIES

MICROCHEM™
 Chemical Barrier Technology

ULTRASONICALLY WELDED & TAPED SEAMS

COLOURS 



FEATURES

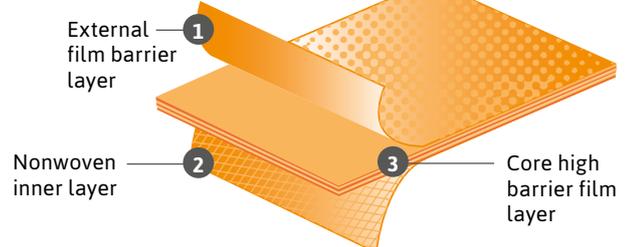


Double zip system



Double cuff design

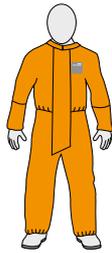
MATERIALS



AlphaTec® 5000
(ex. MICROCHEM®)

COVERALL MODELS

MODEL 103



SIZES

S-5XL

COLOURS



- Collar
- Double zip closure
- Double cuffs with knitted inner cuff
- Elasticated outer cuffs, waist and ankles

MODEL 111



SIZES

S-5XL

COLOURS



- 2-piece hood
- Double zip closure
- Double cuffs with knitted inner cuff
- Elasticated hood, outer cuffs, waist and ankles

MODEL 121-G02



SIZES

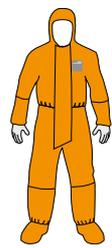
S-5XL

COLOURS



- 2-piece hood
- Double cuffs
- Double zip closure
- Elasticated hood, waist and ankles
- Attached AlphaTec® 02-100 gloves

MODEL 122



SIZES

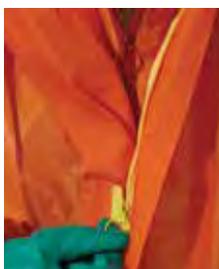
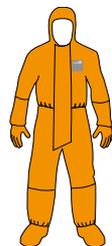
S-5XL

COLOURS



- 2-piece hood
- Double zip closure
- Double cuffs with knitted inner cuff
- Elasticated hood, outer cuffs, waist and boot overflaps
- Integrated socks with boot overflap

MODEL 125-G02



SIZES

S-5XL

COLOURS



- 2-piece hood
- Double cuffs
- Double zip closure
- Elasticated hood, waist and boot overflaps
- Integrated socks with boot overflaps
- Attached AlphaTec® 02-100 gloves



AlphaTec® 5000 APOLLO
(ex. MICROCHEM®)

MODEL 186



DESCRIPTION

- Side entry double zip flap
- Expanded back for internal wearing of self-contained breathing apparatus
- Rear-positioned exhalation valves
- Attached socks with static dissipative sole and leg overflap
- Attached AlphaTec® 02-100 gloves with sleeve overflap
- Semi-rigid multi-layer visor
- Conductive rubber sole

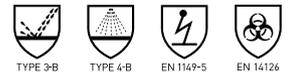
IDEAL APPLICATIONS

- Chemicals
- Oil and petrochemicals
- Pharmaceutical
- Industrial and tank cleaning
- Emergency services (HAZMAT, CBRN)

INDUSTRIES



PERFORMANCE RATINGS



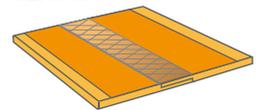
SIZES

M-3XL

COLOURS



ULTRASONICALLY WELDED & TAPED SEAMS



AlphaTec® 5000
(ex. MICROCHEM®)

MODEL 151



DESCRIPTION

- Neoprene rubber face seal
- Rear horizontal zip entry
- Attached socks with boot overflap
- Includes attached AlphaTec® 02-100 gloves with oversleeves and finger loops

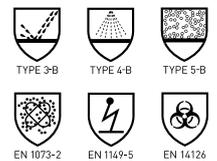
IDEAL APPLICATIONS

- Chemicals
- Oil and petrochemicals
- Pharmaceutical
- Agriculture
- Sewage purification installations
- Industrial and tank cleaning
- Emergency services (HAZMAT, CBRN)

INDUSTRIES



PERFORMANCE RATINGS



TECHNOLOGIES



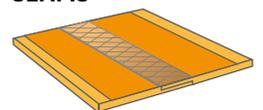
SIZES

S-5XL

COLOURS



ULTRASONICALLY WELDED & TAPED SEAMS



AlphaTec® ACT
(ex-TRELLCHEM®)

TYPE T/LEVEL B



AlphaTec® ACT offers state of the art protection for responders when dealing with the consequences of CBRN terrorism incidents, also in the IDLH (Immediately Dangerous to Life and Health) zone. AlphaTec® ACT is fully certified in accordance with the American standard NFPA 1994 class 2.

DESCRIPTION

- Non-encapsulating design (Level B/Type T) with mask seal, self-contained breathing apparatus (SCBA) worn outside the suit
- The hood features a chemical resistant butyl rubber mask seal
- Durable, long zipper positioned diagonally over the chest, closing downwards for added safety
- The suit is equipped with a sewn-in sock/bootie in the suit material
- NFPA 1994 class 2 requires specified SCBA for compliance

IDEAL APPLICATIONS

- Law enforcement
- First responders
- Hazmat teams
- Hot Zone” search and rescue
- Explosive Ordnance Disposal (EOD)

INDUSTRIES



PERFORMANCE RATINGS

- NFPA 1994 class 2

COLOURS



SIZES

XS-3XL

SEAM TYPE

Seam are stitched with taped inside and outside

MATERIALS

AlphaTec® ACT is made from a durable technical barrier fabric

FEATURES



Mask seal and neck strap



Standard glove attachment



Optional Bayonet ring glove attachment

This product is not CE marked and only available to military and law enforcement in the EU



AlphaTec® 66-300
(ex-TRELLCHEM® SPLASH)

MODEL 111/111-G09/122/122-G09/122W-G09



Splash protective coverall for protection against chemical spray in low-risk environments.

DESCRIPTION

- Nylon zip on the front protected by a double splash-protective flap closing with press studs
- Hood, to be worn under the helmet, and a wide chin flap

IDEAL APPLICATIONS

- Cleaning and maintenance
- Alkali (ammonia) and acids (low-medium concentration)

INDUSTRIES



PERFORMANCE RATINGS



EN 1149-5:
This applies only to the suit material.

SIZES

2XS-3XL

COLOURS



SEAM TYPE

Welded seams

MATERIALS

Polyamide fabric, coated with PVC on both sides

AVAILABLE MODEL & FEATURES

- **Model 111:** Coverall with hood, open sleeves & legs, nylon zipper
- **Model 111-G09:** Coverall with bayonet rings & AlphaTec® 08-354 gloves
- **Model 122:** Coverall with hood, open sleeves, attached PVC boots
- **Model 122-G09:** With bayonet rings & AlphaTec® 08-354 gloves & PVC boots
- **Model 122W-G09:** With bayonet rings & AlphaTec® 08-354 gloves, PVC boots & watertight zipper

FEATURES



Bayonet glove ring



PVC safety boot



Watertight zipper



AlphaTec® 66-310
(ex-TRELLCHEM® SPLASH)

MODEL 111



DESCRIPTION

- A versatile everyday workwear
- Made from a soft and flexible fabric, ensuring wearer comfort
- Suit material is anti-static
- Provides good protection against alkalis and acids
- Offers protection against infective agents
- High-visibility material for added safety at the workplace
- Certified to EN 14605:2005, type 4 (spray-tight)

IDEAL APPLICATIONS

- Cleaning and maintenance
- Alkali (ammonia) and acids (low-medium concentration)

INDUSTRIES



PERFORMANCE RATINGS



EN 1149-5:
This applies only to the suit material.

COLOURS



SIZES

2XS-3XL

SEAM TYPE

Double-welded seams

MATERIALS

Polyamide fabric, single coated with PVC

AlphaTec® 66-320
(ex-TRELLCHEM® SPLASH)

MODEL 146



DESCRIPTION

- Coverall with hump specially designed for first responders
- Available with open sleeves or Bayonet glove ring system
- Made from a strong, soft and flexible fabric, ensuring wearer comfort
- Provides good protection against alkalis and acids
- Offers protection against infective agents

IDEAL APPLICATIONS

- Decontamination
- Cleaning and maintenance
- Alkali (ammonia) and acids (low-medium concentration)

INDUSTRIES



PERFORMANCE RATINGS



EN 1149-5:
This applies only to the suit material.

COLOURS



SIZES

2XS-3XL

SEAM TYPE

Double-welded seams

MATERIALS

Polyamide fabric, single coated with PVC

AlphaTec® 66-320
(ex-TRELLCHEM® SPLASH)

MODEL 151/156



DESCRIPTION

- Rear-entry full-body splash protection
- Available with double open legs or sewn-in socks
- Made from a strong, soft and flexible fabric, ensuring wearer comfort
- Provides good protection against alkalis and acids
- Offers protection against infective agents

IDEAL APPLICATIONS

- Decontamination
- Cleaning and maintenance
- Alkali (ammonia) and acids (low-medium concentration)

INDUSTRIES



PERFORMANCE RATINGS



EN 1149-5:
This applies only to the suit material.

COLOURS



SIZES

2XS-3XL

SEAM TYPE

Double-welded seams

MATERIALS

Polyamide fabric, single coated with PVC



AlphaTec® 56-100/56-001

APRON



DESCRIPTION

- Medium to heavy duty splash protection
- Provides superior flexibility and resistance to chemicals, fats, oils, grease, punctures and abrasion while at the same time offering easy cleaning
- Nylon ties and PVC grommets
- Vinyl
- 7-8mil PVC (56-001)/ 18mil die cut PVC (56-100)

IDEAL APPLICATIONS

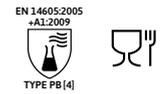
- Chemical industry
- Food handling

INDUSTRIES



CATEGORY III

PERFORMANCE RATINGS



COLOURS



AlphaTec® 56-910

APRON WITH SLEEVES



DESCRIPTION

- Provide excellent protection against acid and alkali splash
- Elastic vinyl material, with good puncture resistance and abrasion resistance
- Effective protection of chemicals, fats and oils
- Can be cleaned to Class 100 clean room standard

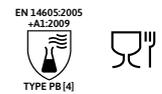
IDEAL APPLICATIONS

- Medical laboratory
- Pharmaceutical industry
- Food processing
- Cleanliness/hygiene
- Chemical processing

INDUSTRIES



PERFORMANCE RATINGS



COLOURS

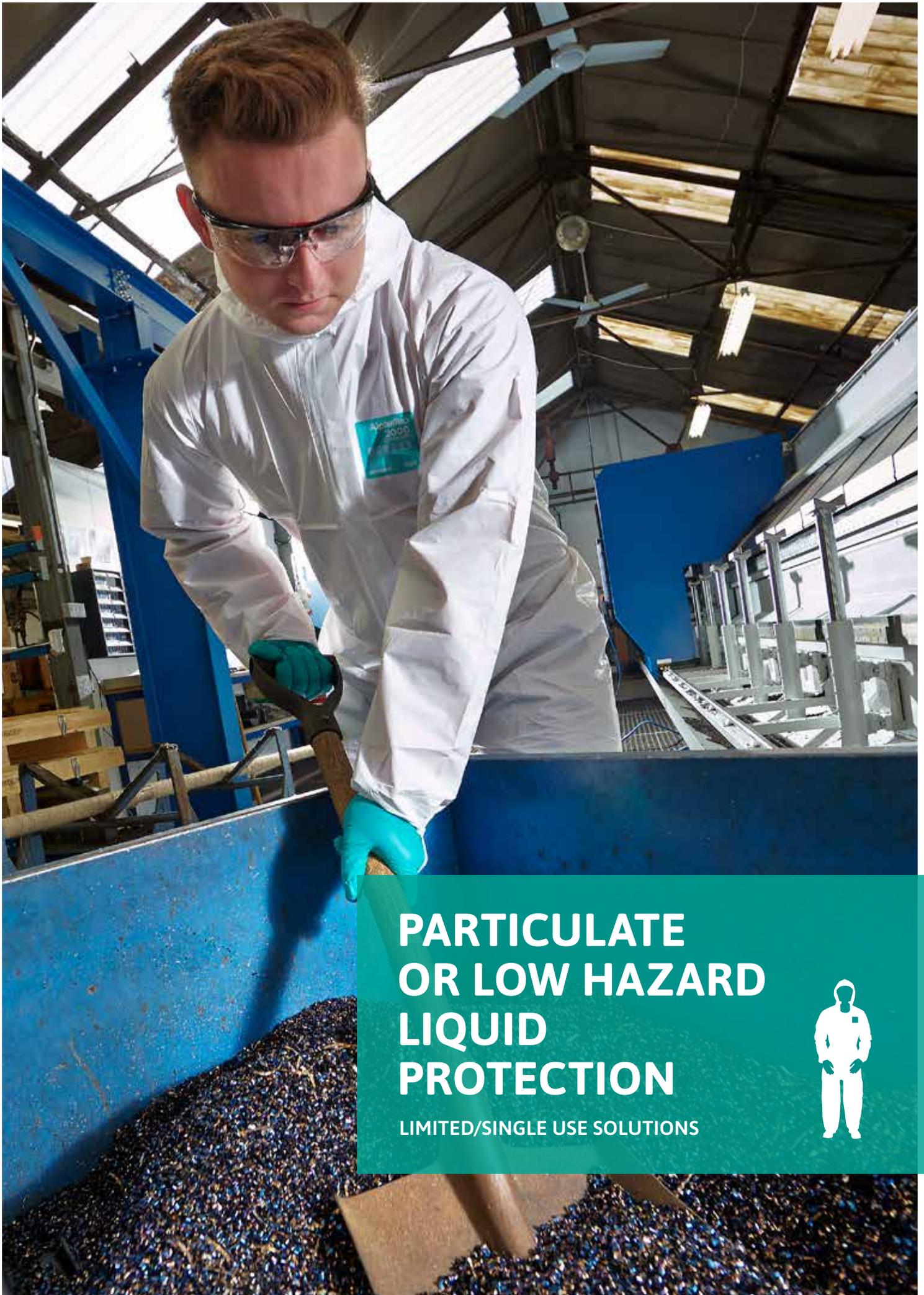


SIZES

- S-3XL

MATERIALS

- PVC surface



PARTICULATE OR LOW HAZARD LIQUID PROTECTION

LIMITED/SINGLE USE SOLUTIONS





AlphaTec® 1500 PLUS
(ex. MICROGARD®)

MODEL 157



AlphaTec® 1500 PLUS is a highly breathable anti-static SMS fabric which utilises the latest developments in micro fibre technology to ensure good filtration efficiency.

DESCRIPTION

- **Protection** – Proven to filter 99.9% of particles >3 microns*
- **Comfort** – Air and water vapour permeable (“breathable”) to help reduce the risk of heat stress
- **Silicone-free** – Critical in spray painting applications
- **Anti-static** – Tested according to EN 1149-5
- **Optimised body fit** – Improves wearer comfort and safety

*KAKEN particle penetration test

IDEAL APPLICATIONS

- Asbestos-related work
- Handling powders
- General maintenance
- Construction
- Pharmaceutical industries
- Wood and metal processing
- Touch-up paint spraying
- Fibre-glass/resin applications/ceramic fibres

INDUSTRIES



PERFORMANCE RATINGS



SIZES

S-5XL

COLOURS

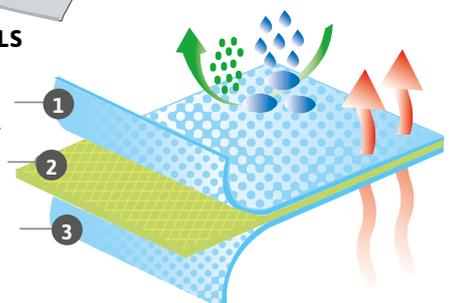


STITCHED SEAMS



MATERIALS

- 1 Nonwoven outer layer
- 2 Meltblown layer
- 3 Nonwoven inner layer



FEATURES



Elasticated 3-piece hood



Elasticated wrists, waist and ankles



2-way front zip



AlphaTec® 1800
(ex. MICROGARD®)

MODEL 157



AlphaTec® 1800 is a lightweight, breathable material and is particularly suited to warmer working environments. Provides a good barrier to low hazard liquid spray and fine particulates.

DESCRIPTION

- **Protection** – Proven barrier to low-concentration liquid chemicals, liquid and particulate biological hazards
- **Comfort** – Moisture vapour permeable (“breathable”) to help reduce the risk of heat stress
- **Silicone-free** – Critical in spray painting applications
- **Low-linting** – Reduced risk of contamination in critical areas
- **Anti-static** – Tested according to EN 1149-5
- **Optimised body fit** – Improves wearer comfort and safety

IDEAL APPLICATIONS

- Pharmaceutical industries
- Paint spraying
- Boat and ship building
- Mining
- General maintenance
- Powder handling

INDUSTRIES

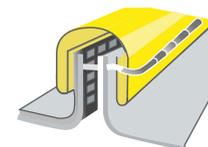


PERFORMANCE RATINGS

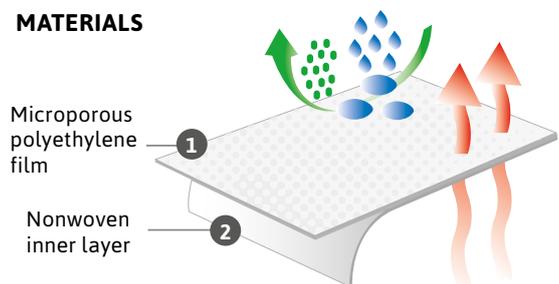


COLOURS

BOUND SEAMS



MATERIALS



FEATURES



3-piece hood



Elasticated hood



2-way front zip



AlphaTec® 1800 STANDARD
(ex. MICROGARD®)

MODEL 111



DESCRIPTION

- 3-piece hood
- 2-way front zip with resealable storm flap
- Elasticated wrists, waist and ankles

IDEAL APPLICATIONS

- General maintenance
- Paint spraying
- Powder handling

INDUSTRIES



PERFORMANCE RATINGS



SIZES

S-5XL

COLOURS



BOUND SEAMS



AlphaTec® 1800 Ts PLUS
(ex. MICROGARD®)

MODELS 103, 111, 122 & 156



DESCRIPTION

- **Protection** – Proven barrier to low-concentration liquid chemicals, liquid and particulate biological hazards
- **Comfort** – Moisture vapour permeable (“breathable”) to help reduce the risk of heat stress
- **Silicone-free** – Critical in spray-painting applications
- **Optimised body fit** – Improves wearer comfort and safety
- **Thumb loops** – Help to prevent sleeve movement when working above your head
- **Chinstrap** – Helps to reduce the risk of cross contamination

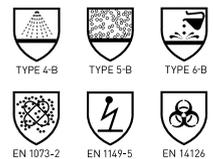
IDEAL APPLICATIONS

- Pharmaceutical industries
- Paint spraying
- Boat and shipbuilding
- Mining

INDUSTRIES



PERFORMANCE RATINGS



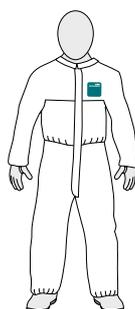
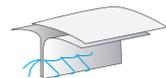
SIZES

S-5XL

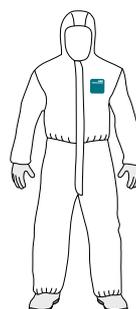
COLOURS



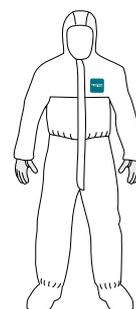
STITCHED & TAPED SEAMS



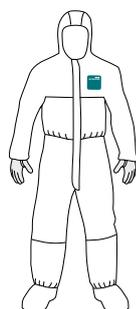
Model 103



Model 111



Model 122



Model 156



AlphaTec® 1800 COMFORT
(ex. MICROGARD®)

MODEL 195



AlphaTec® 1800 COMFORT, model 195, was developed in collaboration with the market leader in wind generation power systems.

DESCRIPTION

- **Protection** – Proven barrier to low-concentration liquid chemicals and airborne particulates
- **Comfort** – Air and moisture vapour permeable (“breathable”) SMS hood, full back and underarms to help reduce the risk of heat stress
- **Silicone-free** – Critical in spray painting applications
- **Low-linting** – Reduced risk of contamination in critical areas
- **Anti-static** – Tested and certified in accordance with EN 1149-5

IDEAL APPLICATIONS

- Composites
- General maintenance
- Paint spraying
- Surface preparation
- Boat and ship building
- Wind turbine manufacturing

INDUSTRIES



PERFORMANCE RATINGS



SIZES

S-5XL

COLOURS



BOUND SEAMS

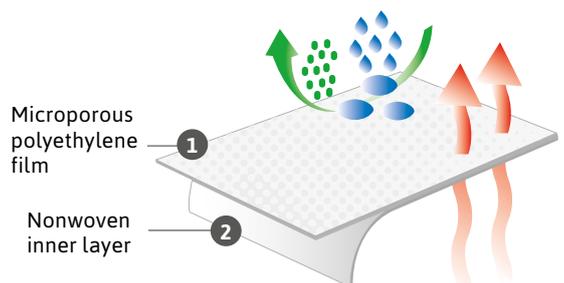
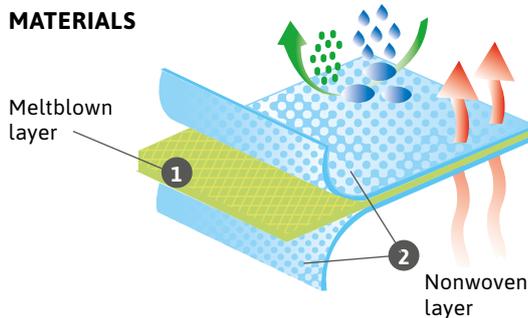


FEATURES



Breathable back

MATERIALS





AlphaTec® 2000
(ex. MICROGARD®)



AlphaTec® 2000 provides both protection and comfort with exceptional liquid and particulate protection. Ideal for a wide range of industrial applications.

DESCRIPTION

- **Protection** – Excellent liquid penetration resistance and barrier to fine particulates (>0.01 microns*)
- **Comfort** – Moisture vapour permeable (“breathable”) to help reduce the risk of heat stress
- **Silicone-free** – Critical in paint-spraying applications
- **Low-linting** – Reduces the risk of fibre contamination in critical areas
- **Optimised body fit** – Improves wearer comfort and safety
- **Anti-static** – Tested according to EN 1149-5
*EMSL test method

IDEAL APPLICATIONS

- Pharmaceutical industries
- Agriculture
- Cleanrooms
- Paint spraying
- Crime scene investigation
- Veterinary services

INDUSTRIES

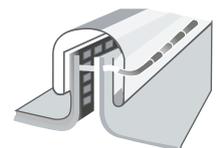


PERFORMANCE RATINGS



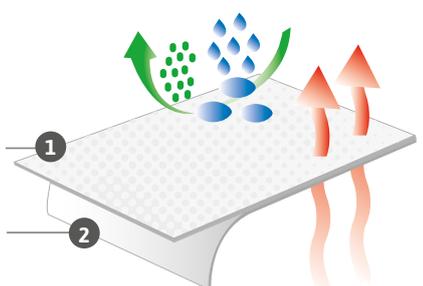
COLOURS

BOUND SEAMS



MATERIALS

Microporous polyethylene film
Nonwoven inner layer



FEATURES



Finger loops



3-piece hood



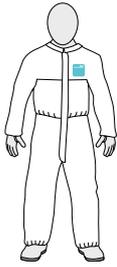
2-way front zip



AlphaTec® 2000 STANDARD
(ex. MICROGARD®)

COVERALL MODELS

MODEL 103

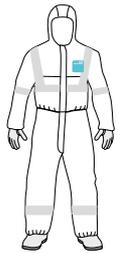


SIZES
S-5XL

COLOURS

- Collar
- 2-way front zip with resealable storm flap
- Finger loops
- Elasticated waist, wrists and ankles

MODEL 113

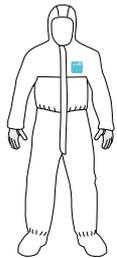


SIZES
S-5XL

COLOURS

- 3-piece hood
- 2-way front zip with resealable storm flap
- Finger loops
- Elasticated hood, waist, wrists and ankles
- Reflective Hi-Vis tape for enhanced visibility

MODEL 122

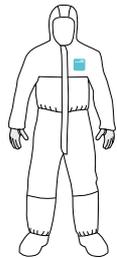


SIZES
S-5XL

COLOURS

- 3-piece hood
- 2-way front zip with resealable storm flap
- Finger loops
- Elasticated hood, waist, wrists and ankles
- Attached boot with ankle ties and anti-slip soles

MODEL 156

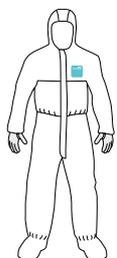


SIZES
S-5XL

COLOURS

- 3-piece hood
- 2-way front zip with resealable storm flap
- Finger loops
- Elasticated hood, waist, wrists, ankles and overflaps
- Integrated socks with boot overflaps

MODEL 157

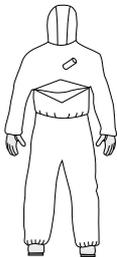


SIZES
S-5XL

COLOURS

- 3-piece hood
- 2-way front zip with resealable storm flap
- Finger loops
- Elasticated hood, waist, wrists and ankles

MODEL 162



SIZES
S-5XL

COLOURS

- Pass-thru device for use with fall-arrest equipment
- 3-piece hood
- 2-way front zip with resealable storm flap
- Finger loops
- Elasticated hood, waist, wrists and ankles



AlphaTec® 2000 COMFORT
(ex. MICROGARD®)

MODEL 129



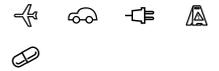
DESCRIPTION

- **Protection** – Hood, arms, legs and front torso in AlphaTec® 2000 fabric
- **Comfort** – Air and water vapour permeable (“breathable”) to help reduce the risk of heat stress
- **Breathable SMS back panel**
- **Silicone-free** – Critical in spray-painting applications
- **Anti-static** – Tested according to EN 1149-5
- 3-piece hood
- Elasticated hood, wrists, waist and ankles
- 2-way front zip with resealable storm flap

IDEAL APPLICATIONS

- Pharmaceutical industry
- Cleanrooms
- Paint spraying
- Veterinary services
- Pest control

INDUSTRIES



PERFORMANCE RATINGS



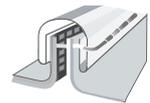
COLOURS



SIZES

S-5XL

BOUND SEAMS



AlphaTec® 2000 SOCO
(ex. MICROGARD®)

MODEL 128



DESCRIPTION

- **Ultra-low-linting** – Reduces the risk of crime scene contamination
- **Self-adhesive pockets** – Can be positioned anywhere on the garment to secure equipment
- **Finger loops** – To prevent sleeve movement when working above your head
- **Protection** – From biological agents in the highest performance class according to EN 14126
- **Anti-static** – Tested according to EN 1149-5
- Elasticated hood, wrists, waist and ankles
- 2-way front zip with resealable storm flap
- 2-piece hood
- Chinstrap

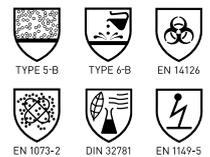
IDEAL APPLICATIONS

- Forensics
- Scene of crime officers (SOCOs)
- Crime scene investigation (CSI)

INDUSTRIES



PERFORMANCE RATINGS



COLOURS



SIZES

S-5XL

BOUND SEAMS





AlphaTec® 2000 Ts PLUS
(ex. MICROGARD®)

MODELS 103, 111, 122, 128 & 156



DESCRIPTION

- **Protection** – Proven barrier to low concentration liquid chemicals, diluted pesticides, liquid and particulate biological hazards
- **Comfort** – Moisture vapour permeable (“breathable”) to help reduce the risk of heat stress
- **Silicone-free** – Critical in spray-painting applications
- **Ultra-low-linting** – Reduced risk of contamination in critical areas
- **Anti-static** – Tested according to EN 1149-5
- **Optimised body fit** – Improves wearer comfort and safety
- **Tunnelled elasticated wrists, hood and ankles** – Helps to minimise the risk of linting and cross contamination
- **Thumb loops** – Help to prevent sleeve movement when working above your head
- **Chinstrap** – Helps to reduce the risk of cross-contamination

IDEAL APPLICATIONS

- Agriculture
- Paint spraying
- Pharmaceutical industries
- Fibre-glass product manufacturing
- Boat and shipbuilding
- Mining

INDUSTRIES



PERFORMANCE RATINGS



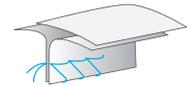
COLOURS



SIZES

S-5XL

STITCHED & TAPED SEAMS





PERFORMANCE RATINGS

Models 209/213/214/219/301



MODEL 209 LAB COAT



- Front zip fastening
- Left breast pocket
- Lower right pocket
- Bound seams
- Category III

SIZES: S-3XL

COLOURS

MODEL 301 TROUSERS



- Elastication to waist and ankles
- Bound seams
- Category III

SIZES: S-3XL

COLOURS

MODEL 407 OVERBOOTS - ESD



- Tie fastening
- Elastic to top of boot
- Bound seams
- ESD PVC Sole
- Category I

SIZES: One size (fits size 42-46) **COLOURS**

MODEL 213 APRON



- Tie fastening to waist
- 100 cm long tie fastening
- Category III

SIZES: One size

COLOURS

MODEL 400 OVERSHOES



- Elasticated opening
- Bound seams
- Category I

SIZES: One size (fits size 42-46) **COLOURS**

MODEL 417 ESD SHOE COVERS



- Open feed
- Rolling seams
- ESD PVC sole

SIZES: 39-42 42-46 46-48 **COLOURS**

MODEL 214 APRON WITH SLEEVES



- Rear VELCRO® fastening
- Elasticated wrists
- Bound seams
- Category III

SIZES: S-3XL

COLOURS

MODEL 401 OVERSHOES



- Elasticated opening
- Bound seams
- Category I

SIZES: One size (fits size 46-48) **COLOURS**

MODEL 503 HOODS



- Balaclava style
- Face opening elastic design
- Piping seams

SIZES: One size **COLOURS**

MODEL 219 JACKET & TROUSER SET



- Zip fastening jacket
- Elasticated waist, hem and ankles on jacket and trousers
- Bound seams
- Category III

SIZES: S-5XL

COLOURS

MODEL 406 OVERBOOTS



- Tie fastening
- Elastic to top of boot
- Bound seams
- Category I

SIZES: One size (fits size 42-46) **COLOURS**

MODEL 507 CAPE HOOD



- Balaclava-style cape hood covering part of shoulders
- VELCRO® fastening to front
- Bound seams
- Category I

SIZES: One size **COLOURS**

MODEL 600 OVERSLEEVES



- Elasticated at both ends
- Bound seams
- Category I

SIZES: One size **COLOURS**



AlphaTec® 2300
(ex. MICROGARD®)

MODEL 111



AlphaTec® 2300 provides an excellent barrier to harmful chemicals, while being lightweight and relatively strong and durable.

DESCRIPTION

- **Protection** – A good barrier to numerous inorganic liquid chemicals, including acids and bases
- **Highly visible** – Available in bright yellow colour for improved worker safety
- **Comfort** – Lightweight yet relatively strong and durable
- **Anti-static** – Tested according to EN 1149-5
- **Designed to protect** – Typical coverall features include respirator fit hood and a zip flap with self-adhesive tape closure

IDEAL APPLICATIONS

- Environmental cleanup
- Sewage purification installations
- Industrial and chemical manufacturing
- Composites manufacturing
- Pharmaceutical industry

INDUSTRIES



PERFORMANCE RATINGS

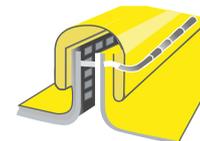


TECHNOLOGIES



COLOURS

BOUND SEAMS



FEATURES



Finger loops



3-piece hood

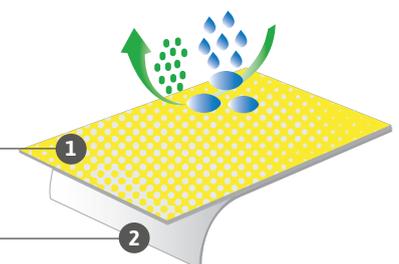


2-way front zip

MATERIALS

Polyethylene (PE) barrier coating

Bi-component nonwoven





AlphaTec® 2300 COMFORT
(ex. MICROGARD®)

MODEL 129



AlphaTec® 2300 COMFORT has been engineered with workers involved in composites manufacturing and related industries in mind, to offer protection where you need it most and ventilation to help reduce the risk of heat stress.

DESCRIPTION

- **Protection** – Hood, arms, legs and front torso in 2300 fabric, which is an excellent barrier to resins and fibers
- **Innovation** – Fabric construction ensures that there is no risk of delamination should a wearer make contact with a tacky surface
- **Comfort** – Air and water vapour permeable (“breathable”) back panel ventilates the suit, to help reduce the risk of heat stress
- **Silicone Free** - Critical in spray painting applications
- **Anti-static** – Tested according to EN 1149-5

IDEAL APPLICATIONS

- Equipment maintenance and repair
- Equipment repair & maintenance
- Handling structural and body components
- Assembly & inspection of components
- Fibre Glass/Resin Applications/Ceramic Fibres

INDUSTRIES



PERFORMANCE RATINGS

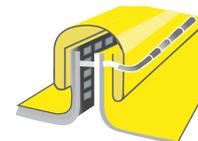


TECHNOLOGIES



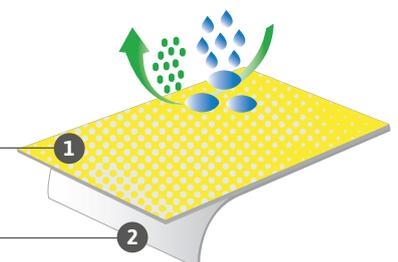
COLOURS

BOUND SEAMS



MATERIALS

Polyethylene (PE) barrier coating
Bi-component nonwoven



FEATURES



Finger loops



3-piece hood



Breathable SMS back panel



AlphaTec® 2500
(ex. MICROGARD®)



AlphaTec® 2500 is a unique material offering exceptional mechanical strength, liquid and particulate protection.

DESCRIPTION

- **Protection** – Achieves the highest classifications for protection from biological agents in accordance with EN 14126:2003 and ASTM F 1671 for penetration of blood, body fluids and blood-borne pathogens
- **Comfort** – Moisture vapour permeable (“breathable”) to help reduce the risk of heat stress
- **Anti-static** – Tested according to EN 1149-5
- **Ultra-low-linting** – Reduced risk of contamination in critical areas

IDEAL APPLICATIONS

- Virally contaminated areas (including avian influenza)
- Biological protection
- Emergency medical response
- Medical research
- Chemical and pharmaceutical industries
- Low-pressure industrial cleaning
- Industrial paint spraying
- Nuclear industry

INDUSTRIES

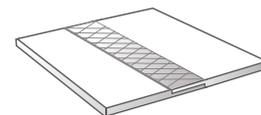


PERFORMANCE RATINGS

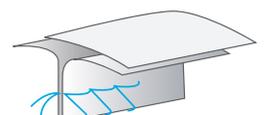


COLOURS

ULTRASONICALLY WELDED SEAMS (STANDARD)



STITCHED & TAPED SEAMS (PLUS)



FEATURES



Finger loops

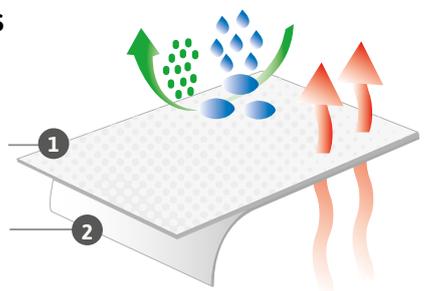


Hood

MATERIALS

Microporous polyethylene film

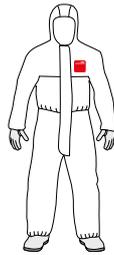
Nonwoven inner layer



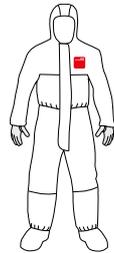


AlphaTec® 2500 STANDARD
(ex. MICROGARD®)

MODELS 111 & 122



Model 111



Model 122

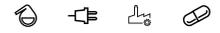
DESCRIPTION

- 3-piece hood
- Elasticated hood, wrist, waist and ankles
- Finger loops
- Red single zip with resealable storm flap

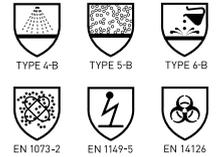
IDEAL APPLICATIONS

- Virally contaminated areas (including Avian Influenza)
- Biological protection
- Emergency medical response
- Medical research
- Chemical and pharmaceutical industries
- Low-pressure industrial cleaning
- Industrial paint spraying
- Nuclear industry

INDUSTRIES



PERFORMANCE RATINGS



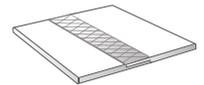
COLOURS



SIZES

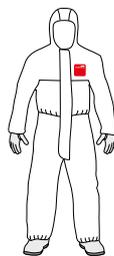
S-5XL

ULTRASONICALLY WELDED SEAMS

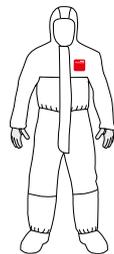


AlphaTec® 2500 PLUS
(ex. MICROGARD®)

MODELS 111 & 122



Model 111



Model 122

DESCRIPTION

- 3-piece hood
- Elasticated hood, wrists and waist
- Finger loops
- White 2-way zip with resealable storm flap
- Integrated socks with boot overflap

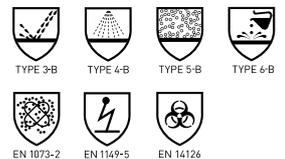
IDEAL APPLICATIONS

- Virally contaminated areas (including avian influenza)
- Biological protection
- Emergency medical response
- Medical research
- Chemical and pharmaceutical industries
- Low-pressure industrial cleaning
- Industrial paint spraying
- Nuclear industry

INDUSTRIES



PERFORMANCE RATINGS



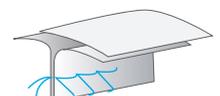
COLOURS



SIZES

S-5XL

STITCHED & TAPED SEAMS





MODEL 406 OVERBOOTS



- Elastic to top of boot
- Tie fastening
- Category I

SIZES: One size (fits size 42-46) **COLOURS**

MODEL 503 CAPE HOOD



- Balaclava-style
- Elasticated face opening
- Bound seams
- Category I

SIZES: One size **COLOURS**

MODEL 213 APRON



- Tie fastening to waist
- 100 cm long
- Tie fastening
- Category I

SIZES: One size **COLOURS**

MODEL 407 OVERBOOTS - ESD



- Elasticated opening
- Anti-slip sole
- Adjustable shoe tie
- Bound seams
- ESD PVC Sole
- Category I

SIZES: 42-46 **COLOURS**

MODEL 507 CAPE HOOD



- Balaclava-style cape hood covering part of shoulders
- VELCRO® fastening to front
- Bound seams
- Category I

SIZES: One size **COLOURS**

MODEL 400 OVERSHOES



- Elasticated opening
- Bound seams
- Category I

SIZES: One size (fits size 42-46) **COLOURS**

MODEL 409 SOCO OVERBOOTS



- Tie fastening
- Blue binding to seams
- Reinforced Surestep non-slip soles
- Adjustable shoe tie
- Category I

SIZES: One size (fits size 42-46) **COLOURS**

MODEL 600 OVERSLEEVES



- Elasticated at both ends
- Bound seams
- Category I

SIZES: One size **COLOURS**



CHEMICAL FLAME RETARDANT PROTECTION

LIMITED/SINGLE USE SOLUTIONS





AlphaTec® 1500 PLUS FR
(ex. MICROGARD®)

MODEL 111



DESCRIPTION

- **Protection** – Flame-retardant and anti-static SMMS nonwoven provides a good barrier to particulates and non-flammable low hazard liquid sprays or splashes
- **Comfort** – Air and water vapour permeable (“breathable”) to help reduce the risk of heat stress
- **Anti-static** – Tested according to EN 1149-5
- **Optimised body fit** – Ensures full freedom of movement when worn over heat and flame protective clothing (EN ISO 14116 Index 2 or above)
- Must be worn over thermal protective garments such as NOMEX®, and never be worn next to the skin

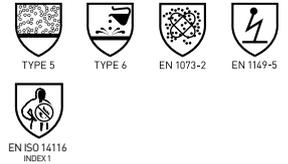
IDEAL APPLICATIONS

- Petrochemical industry
- Industrial cleaning
- Utilities
- General maintenance

INDUSTRIES



PERFORMANCE RATINGS



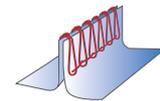
COLOURS



SIZES

M-5XL

STITCHED SEAMS



AlphaTec® FR
(ex. MICROGARD®)

MODEL 111



DESCRIPTION

- **Protection** – Flame retardant-treated Sontara/ wood pulp/polyester fabric with good barrier to particulates and low-level liquid spray
- **Comfort** – Air and water vapour permeable (“breathable”) to help reduce the risk of heat stress
- **Optimised body fit** – Improves wearer comfort and safety
- Must be worn over thermal protective garments such as NOMEX®, and never be worn next to the skin

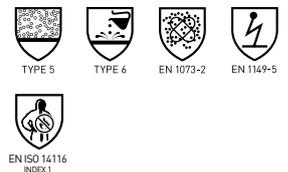
IDEAL APPLICATIONS

- Oil and petrochemicals
- Petroleum distribution and processing
- Utilities

INDUSTRIES



PERFORMANCE RATINGS



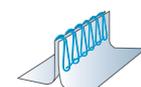
COLOURS



SIZES

M-5XL

STITCHED SEAMS





AlphaTec® CFR
(ex. MICROCHEM®)

MODEL 111



AlphaTec® CFR is a flame retardant material designed to be worn over woven thermal protective garments such as NOMEX®, offering protection from particulates and pressurised liquid spray without compromising worker protection in the event of a flash fire.

DESCRIPTION

- **Protection** – Flame retardant-treated fabric with PVC barrier film offering wearers protection from liquid chemicals to EN Type 3B and 4B
- **Versatile** – Suitable for most applications with the need for protection from chemical spray without compromising wearer protection in the event of a flash fire
- **Optimised body fit** – Improves wearer comfort and safety
- **Highly visible** – Highly visible bright red colour to improve worker safety

IDEAL APPLICATIONS

- Oil and petrochemicals
- Petroleum distribution and processing
- Utilities

INDUSTRIES



SIZES

S-5XL

PERFORMANCE RATINGS

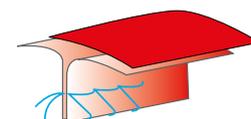


TECHNOLOGIES

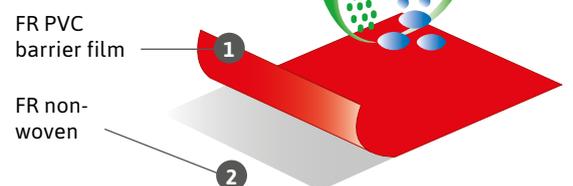


COLOURS

STITCHED & TAPED SEAMS



MATERIALS



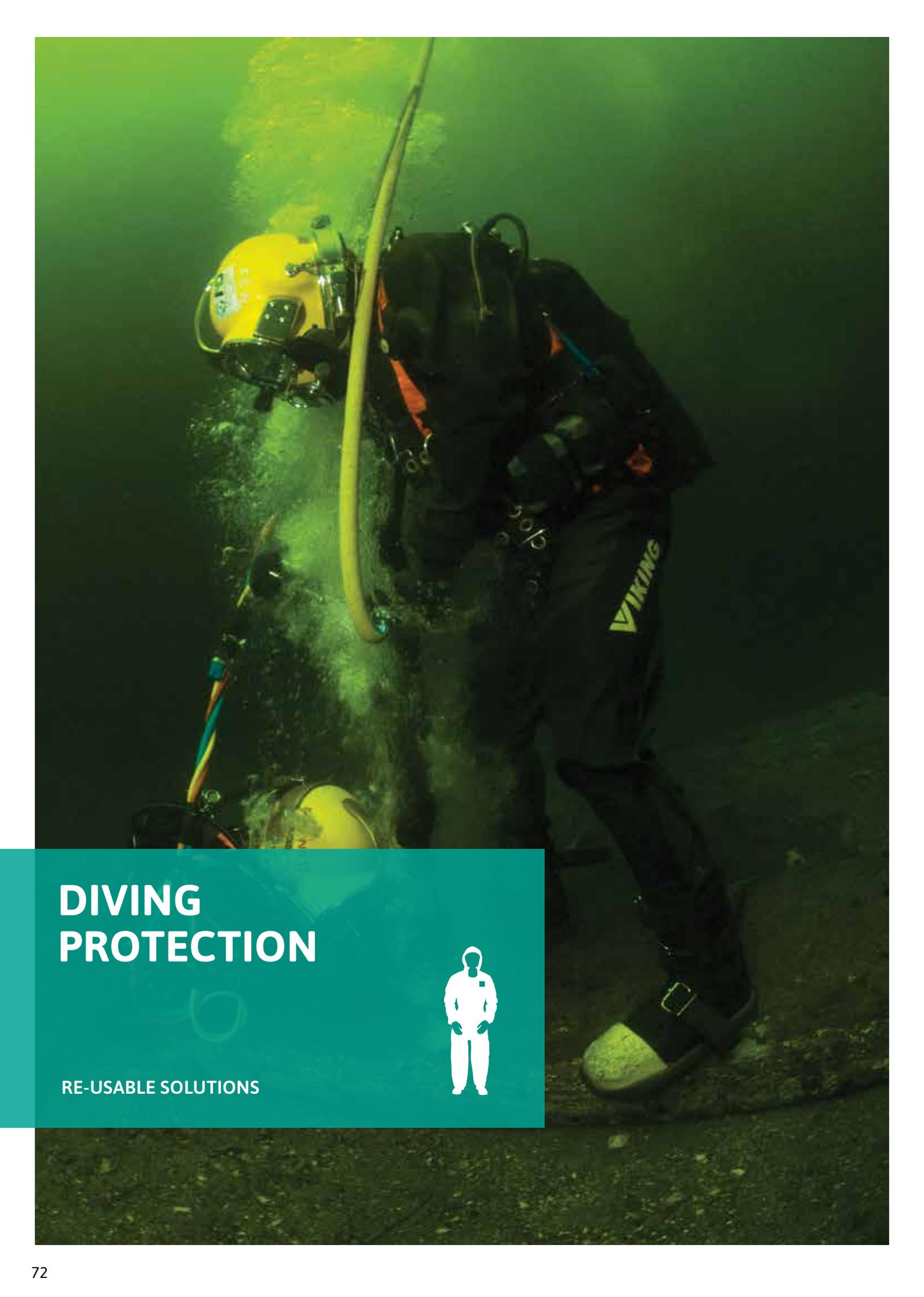
FEATURES



2-piece hood



Double zip closure



DIVING PROTECTION

RE-USABLE SOLUTIONS





VIKING™ PRO



The VIKING™ PRO is Ansell's bestselling dry suit worldwide. Designed for flexibility and comfort in a wide range of applications. Vulcanised seams allow for peace of mind when diving under all situations.

DESCRIPTION

- Internal seams stitched and taped
- External seams vulcanised for peace of mind
- Easy-to-clean exterior when contaminated
- Easy to repair in the field to minimise downtime
- Flexible and comfortable

IDEAL APPLICATIONS

- Underwater inspection
- Underwater search and recovery
- Maintenance inspection
- Disaster recovery

INDUSTRIES



PERFORMANCE RATINGS

EN 14225-2:2017



SIZES

00/SML - 05/XXXL
 01/MED Wide - 04/XXL Wide
 01/MED DWide - 04/XXL DWide

COLOURS

SEAM TYPE

Stitched, taped and vulcanised

MATERIALS

Blend of natural and synthetic rubbers (NR/EPDM), on a 2-way stretch knitted polyester lining. Material weight: 1050 g/m²

FEATURES



Zip



Valve



Collar



VIKING™ PROTECH II
(ex. PROTECH BE NAVY)



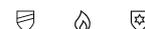
DESCRIPTION

- Internal stitched and taped seams
- External vulcanised seams
- Easy-to-clean exterior when contaminated
- Easy to repair in the field to minimise downtime
- Extremely flexible and comfortable
- A 90-cm non-magnetic HD zip is fitted to the PROTECH 11 suit version

IDEAL APPLICATIONS

- Military use
- Navy diving
- Special forces use
- Fire and rescue diving
- Police search and recovery

INDUSTRIES



PERFORMANCE RATINGS

EN 14225-2:2017



CATEGORY III

COLOURS



SIZES

00/SML - 05/XXXL
01/MED Wide - 04/XXL Wide
01/MED DWide - 04/XXL DWide

SEAM TYPE

Stitched, taped and vulcanised

MATERIALS

Blend of natural and synthetic rubbers (NR/EPDM) on a stretch polyamide/elastane lining. Total material weight: 1250 g/m²

VIKING™ HD



DESCRIPTION

- Heavy-duty material
- Internal stitched and taped seams
- External vulcanised seams for security
- Easy to clean and repair
- Fitted with a heavy-duty zip as standard (non-magnetic version on black suits)
- Can be supplied with non-magnetic valves

IDEAL APPLICATIONS

- Cleaning ships hulls
- Welding and inspection
- Cleaning a fouled propeller
- Nuclear pond inspection
- Inshore diving

INDUSTRIES



PERFORMANCE RATINGS

EN 14225-2:2017



CATEGORY III

COLOURS



SIZES

01/MED - 04/XXL
01/MED Wide - 04/XXL Wide

SEAM TYPE

Stitched, taped and vulcanised

MATERIALS

Natural and synthetic rubbers (NR/EPDM) on a 2-way stretch-knitted polyester lining. Total material weight: 1550 g/m²



VIKING™ HDS



DESCRIPTION

- Internal seams stitched and taped for security
- External seams vulcanised for peace of mind
- Highly resistant to aggressive chemicals, including hydrocarbons
- Material is 5 times more abrasion-resistant than the VIKING™ PRO material
- Easy to clean and repair

IDEAL APPLICATIONS

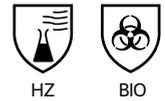
- Underwater inspection
- Underwater search and recovery
- Maintenance inspection
- Disaster recovery

INDUSTRIES



PERFORMANCE RATINGS

EN 14225-2:2017



CATEGORY III

COLOURS



SIZES

00/SML - 05/XXXL
 01/MED Wide - 04/XXL Wide
 01/MED DWide - 04/XXL DWide

SEAM TYPE

Stitched, taped and vulcanised

MATERIALS

NITECS material is an HNBR rubber compound, coated onto a 2-way stretch-knitted black polyester lining. Total material weight 1050 g/m²

VIKING™ HAZTECH



DESCRIPTION

- Lightweight and robust material
- High-frequency welded seams for maximum strength and safety
- Ideal for warm water and/or warm climate diving
- Suitable for cold water diving (tested for flex cracking after >200 flexes down to -40°C)
- Easy-to-clean exterior surface
- Suitable for contaminated-water diving operations

IDEAL APPLICATIONS

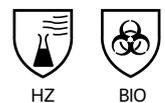
- Light commercial diving operations
- Military diving
- Fire and rescue diving
- Inshore diving

INDUSTRIES



PERFORMANCE RATINGS

EN 14225-2:2017



CATEGORY III

COLOURS



SIZES

00/SML - 04/XXL
 00/SML Wide - 04/XXL Wide
 00/SML DWide - 04/XXL DWide

SEAM TYPE

High-frequency welded and taped inside for visual purposes only

MATERIALS

TPU (thermoplastic polyurethane) outer layer in red or black, single-coated onto a black-knitted nylon fabric. Material weight: 480 g/m²



VIKING™ VSN



DESCRIPTION

- Unique stretch material
- “Vulca Seam” technology
- Highly abrasion- and puncture-resistant
- Neutrally buoyant material
- Front and rear entry versions available
- Front entry suits feature an adjustable torso with external crotch strap

IDEAL APPLICATIONS

- Underwater search and rescue
- Special forces diving
- Technical diving
- Inshore diving

INDUSTRIES



PERFORMANCE RATINGS

EN 14225-2:2005

COLOURS



SIZES

00/SML - 04/XXL
00/SML Wide - 04/XXL Wide
00/SML DWide - 04/XXL DWide

SEAM TYPE

Stitched, taped and vulcanised

MATERIALS

Trilaminate construction comprising of a mid-ply of NR/EPDM rubber with external and internal-knitted Armatex jersey nylon. Average material weight: 1100 g/m²

VIKING™ VTS



DESCRIPTION

- Lightweight puncture- and abrasion-resistant materials
- “Vulca Seam” technology for complete water tightness
- Front and rear entry versions available
- Front entry suits feature an adjustable torso with external crotch strap

IDEAL APPLICATIONS

- Underwater search and recovery
- Military diving
- Recreational diving
- Inshore diving

INDUSTRIES



PERFORMANCE RATINGS

EN 14225-3:2017

COLOURS



SIZES

00/SML - 04/XXL
00/SML Wide - 04/XXL Wide
00/SML DWide - 04/XXL DWide

SEAM TYPE

Stitched and vulcanised

MATERIALS

255 g nylon/butyl/nylon.
450 g Cordura/butyl/
polyester. 400 g polyester/
butyl/polyester



VIKING™ WRS



DESCRIPTION

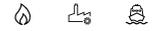
- "Vulca Seam" technology
- Abrasion- and puncture-resistant
- Easy to clean when contaminated with biological contaminants
- Front entry, non-adjustable torso, for ease of operation
- Also available: VIKING™ WRS-D - WRS suit with valves added for rescue teams who need a combination surface rescue/diving rescue suit

Note: This suit is designed for above water rescue operations only

IDEAL APPLICATIONS

- Water rescue
- Swift water rescue
- Flooding applications

INDUSTRIES



PERFORMANCE RATINGS

PPE Directive 89/686/EEC using applicable parts of EN 15027-1

COLOURS



SIZES

00/SML - 04/XXL
00/SML Wide - 04/XXL Wide
00/SML DWide - 04/XXL DWide

SEAM TYPE

Stitched and vulcanised

MATERIALS

255 g nylon outer/butyl midply/nylon inner

VIKING™ Hot Water Suit



DESCRIPTION

- Flexible material and pattern layout
- Abrasion resistant RO-TEX™ nylon exterior
- PU coating for ease of cleaning
- Glued and stitched seams, with front seams coated for protection
- PU reinforcements on knees and elbows
- New "click" function valve with 3 flow settings and a dump mode

IDEAL APPLICATIONS

- Saturation diving
- Military diving
- Inshore diving

INDUSTRIES



PERFORMANCE RATINGS

EN 14225-3:2017

COLOURS



SIZES

Regular: S-2XL
Tall: S-XL

SEAM TYPE

Glued and stitched

MATERIALS

5 mm neoprene with RO-TEX™ nylon exterior with a PU top coating. 3 mm underarm panels



VIKING™ XT500

UNDERSUIT SET

**DESCRIPTION**

- More warmth created with less bulk
- Flexible assembly of separate top, leggings and socks supplied as a complete set
- Added crotch strap for security

IDEAL APPLICATIONS

- All diving operations

INDUSTRIES**COLOURS****SIZES:** S-3XL**MATERIALS**

Polyester/nylon/Lycra®

VIKING™ Commercial Overboots

**DESCRIPTION**

- 0.6 mm reinforced rubber construction
- 2.5 mm reinforced rubber toe cap for added protection
- 5 pairs of unplated brass eyelets on each boot
- 2 m x 6 mm polyester rope laces for MED size boots
- 2.5 m x 6 mm polyester rope laces for LGE size boots
- NEW: LGE size overboots added to the range for use over larger size rubber suit
- Lead insoles available separately

IDEAL APPLICATIONS

- To be worn over a rubber dry suit boot

INDUSTRIES**COLOURS****SIZES:** M-L

VIKING™ Neoprene semi-dry gloves

**DESCRIPTION**

- Warm and flexible
- Added Kevlar® protection on the fingers and palms for extended wear
- Adjustable wrist strap

IDEAL APPLICATIONS

- Any dive operations where a dry glove is not necessary

INDUSTRIES**COLOURS****SIZES:** S-2XL**MATERIALS**

5 mm neoprene with Kevlar® reinforcements



Ansell



FOR MORE INFORMATION, CONTACT YOUR ANSELL REPRESENTATIVE OR VISIT WWW.ANSELL.COM

Australia

Victoria Gardens
678 Victoria Street (Level 3),
Richmond VIC 3121,
Australia

Japan

Ansell Healthcare Japan Co. Ltd
3-4-31 Roppongi, Minato-ku,
Tokyo, Japan #106-0032

Korea

Ansell Korea Co. Ltd.
352-65, Jangmu-ro Janggye-myeon,
Jangsu-gun, Korea

Asia Pacific Region

Ansell Global Trading Center (Malaysia) Sdn Bhd
Prima 6, Prima Avenue,
Block 3512 Jalan Teknokrat 6
63000 Cyberjaya, Malaysia
T: +603 8310 6688
F: +603 8310 6699
MarketingAsia@ansell.com



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