



AlphaTec™

66-600 Series

Breathable Chemical Protective Clothing

INSTRUCTIONS FOR USE

Available in 1 language
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Safety Considerations:

These Instructions for Use (IFU) are valid only for AlphaTec™ 66-600 Series garments and provide important information regarding their use, care and maintenance.

The garment may only be used by specially trained personnel who are familiar with the contents of this manual.

Failure to comply with any of the recommendations given herein may result in serious injury or death.

The Instructions for Use are updated regularly and may be available in other languages. Please check the website www.ansell.com to make sure you have the latest edition of the IFU in your preferred language.

Chemical Response

Choosing the appropriate chemical protective clothing, accessories and other necessary equipment to deal with a chemical exposure or chemical emergency is a decision that has to be made by qualified safety professionals.

Besides the specific chemical(s) encountered, other aspects such as the concentration, temperature of the chemical, mixtures of chemicals, flammability, toxicity etc. have to be considered.

Identify the chemicals before entering into the hazardous area in chemical protective clothing. Always minimize the exposure to and avoid direct contact with chemicals as much as possible.

Product Description:

Breathable Chemical Protective Clothing

AlphaTec™ 66-600 Series chemical splash protective garments provide liquid splash protection while maintaining all-day breathable comfort.

Features include:

- Lightweight, breathable fabric that allows body heat and moisture vapor to dissipate away from the body, minimizing risk of heat stress and providing outstanding comfort.
- Highly durable garments that can be safely washed without compromising chemical protection (see Decontamination and Cleaning section).
- Fabric options to address different working environments and risks.

Compliance

Blue FR garments with Nomex® Models : 66670 , 66671, 66672 & 66677 meet the requirements according to NFPA 2112, Standard on Flame-Resistant Clothing for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire, 2023 Edition

Please note we do not claim NFPA 2112 on Blue Garment (Hood) 66-674

Please note we do not claim NFPA 2112 on Red Garments: Models: 66660, 66662, 66663, 66664, & 66667.

Proper Use:

Blue FR garments shall be used in accordance with NFPA 2113 for the selection, care, use, and maintenance of flame-resistant (FR) garments for industrial personnel exposed to short-duration thermal hazards like flash fires.

Users in other countries are advised to consult national or other applicable personal protective equipment regulations.

It should be noted that most performance properties of the liquid splash-protective clothing item cannot be tested by the user in the field.

Limitations of Use

This clothing offers chemical liquid splash protection and is not appropriate for use where vapor protection is required. Any other use may result in serious injury or death. Consult the Stedfast protective barrier fabrics Technical Data in the Ansell published literature and on www.ansell.com for information on the protection offered against specific chemicals.

The garment may be used in temperature ranges from -40°F to 150°F (-40°C to 65°C).

Never use the garment near open flames or intense heat.

Only the blue Nomex® version is suitable for use where heat or arc flash might be anticipated.

WARNING! The respiratory equipment has not been evaluated for chemical permeation resistance consistent with the other ensemble and elements.

The manufacturer disclaims all responsibility for the improper use of Ansell products.

The determination of the suitability of Ansell products for an application is the final responsibility of the user.

These Instructions for Use do not in any way comprise a guarantee or warranty on the part of Ansell, and Ansell expressly disclaims any implied warranty of merchantability or fitness. Ansell is not in any way nor under any conditions liable for compensation to the purchaser or commercial user of a protective garment for injury to (including death of) any person or loss of or damage to property of any kind or for costs, loss of profits or other damage or loss of any nature whatsoever.

Pre-use:

Make sure that the garment has not passed its recommended shelf life (see "Storage Life/Shelf Life") and that the garment is free from damage before it is taken into service.

Also make sure that the garment is decontaminated and inspected before it is returned into service or storage. If the garment is damaged, take it out of service and replace.

Recommended Undergarments

Undergarment selection will depend on the task at hand, and on the prevailing climatic conditions.

If the employer's safety assessment has identified extreme temperature hazards, such as a high or low temperature environment or the potential for workers to come into contact with hot or cold surfaces or liquids, then additional undergarments or thermal undergarments may be required to provide further protection and comfort for the worker.

This is particularly relevant to users of AlphaTec™ blue FR clothing with Nomex® fiber, where arc flash and/or fire hazards have been identified in the safety assessment.

Donning and Doffing:

- A routine should be established and practiced periodically for donning and doffing AlphaTec™ Breathable clothing.
- Assistance should be provided if required by the user (particularly for doffing of contaminated clothing).
- Clothing fit should be evaluated. If the clothing is too small, it will restrict movement, increase the likelihood of accidental damage to the clothing and will accelerate wearer fatigue. If the clothing is too large, it may decrease user dexterity and coordination.

Donning Procedure

- Inspect clothing for damage and expiry date before donning.
- For **coveralls and bib overalls**, step into the legs, pull over feet and gather the garment around the waist.
- Put on chemical-resistant safety boots, pull the garment legs down over the boots and secure the hook-and-loop closures on the legs of the garment.
- For **bib-overalls**, secure shoulder straps. Adjust buckles for a comfortable fit and don jacket.
- For **coveralls, jackets and coats**, put arms into sleeves, close zipper and secure zipper storm flap and collar using hook-and-loop closures. Don protective gloves and pull sleeves down over the glove cuffs and secure using hook-and-loop closures.
- **Hoods**, if used, should be fixed to the coverall, jacket or coat before donning, or afterwards with assistance from a co-worker. Ensure hood is securely fixed to the garment using the hook-and-loop closure. Adjust hood around face using pull-cord (ensuring vision is not impeded).
- Lastly, ensure all closures and zipper are closed and secure before proceeding to work area.

Gloves and boots should interface securely with the sleeves and pant legs.

Doffing Procedure

- If contamination has occurred, decontaminate the garment/worker using a procedure appropriate to the working environment and the chemical hazards encountered. This must be developed by the employer.
- Remove any extraneous or disposable clothing if used (e.g. boot covers, outer gloves).
- Remove, or have assistant loosen and remove the wearer's safety footwear.
- Open all hook-and-loop closures and the zipper and remove arms from coverall, jacket or coat, one at a time. Once arms are free, have assistant hold or lift the garment away from the wearer, avoiding any contact between the outside surface of the suit and the wearer's or assistant's body. For coveralls and bib-overalls, remove legs from the legs of the garment. Sit if possible to do this. Leave internal gloves on, if any.
- Lay discarded garments out flat, away from the wearer.
- After clothing is removed, remove internal gloves by rolling them off the hand, inside out.
- Remove undergarments and thoroughly cleanse the body.

Storage:

Make sure that the garment is decontaminated and inspected before it is returned into storage.

If the garment is damaged, take it out of service and replace.

Storage Conditions

- Always make sure the garment is clean and dry prior to storage.
- Store in a dry environment, out of direct sunlight.
- Keep away from ozone-generating sources, for example electrical engines, fluorescent lamps and air-conditioners.

Storage Methods

- Garments can be folded as received upon delivery or hung on a hanger or hanger loop.
- The garments should not be hung on a hook that can damage the fabric.

Storage Life/Shelf Life

AlphaTec™ 66-600 Series garments have a recommended shelf life of 5 years, if stored according to customary storage practices:

- They should be stored in their original packaging.
- Temperature range should be between 40°F to 100°F (5°C to 38°C).
- Storage location should be dry.
- Avoid exposure to direct sunlight (UV) and ozone-generating sources such as electrical motors, fluorescent lamps and air-conditioners.

If the above recommendations are followed, then Ansell would expect no decline in garment performance.

It is recommended that appropriate records are maintained and regardless of the duration of storage, a visual inspection should be undertaken before garment use.

Maintenance:**Inspection**

Garments must be inspected upon delivery and before and after each use. Use the following guidelines when inspecting:

- Visually inspect the garments both inside and outside.
- Look for surface damage or tears on material and seams.
- Check the function of the zipper.

If the garment has been subjected to contaminants, it should be decontaminated prior to laundering, re-use or storage. If any damage/malfunction is found, the garment must be taken out of service. Do not attempt to repair.

Decontamination and Cleaning

AlphaTec™ chemical protective garments require proper care to ensure performance.

Do not use clothing items that are not thoroughly cleaned and dried.

After contact with chemicals the garment should be decontaminated with a suitable decontamination solution prior to laundering.

Cleaning and laundering recommendations are as follows:

- Machine wash using powdered laundry detergent in warm water (<105°F), rinse thoroughly.
- For best results, hang to dry. However, garments can be tumbled dried using cotton setting. High temperatures can separate the seam tape.
- DO NOT use liquid bleach, starch or fabric softener.
- DO NOT dry clean.
- DO NOT press or iron.
- DO NOT scrape or scrub the fabric, which could compromise its chemical resistance.
- If the garment is stained by grease or oil, a spray pre-wash can be used on the stains prior to laundering.
- If the hook and loop fasteners become contaminated with lint, brush the hooks carefully with a suitable small brush to remove.

Marking

Marking on the garment can be made by a “permanent marker” type of pen, however the ink may bleed.

Retirement and Disposal:

- Make sure the recommended shelf life of the garment is not exceeded.
- If any damage/malfunction is found during inspection, the garment must be taken out of service.
- Garments that are not completely decontaminated must be disposed of in a safe manner, taking local regulations for the specific chemical into account.
- Garments showing indications of chemical degradation (such as brittleness, stiffness, swelling, stickiness or other changes in the material) must be disposed of.

Technical Data Package:**Sizes**

AlphaTec™ 66-600 Series garments are available in different sizes for the wearer's safety and comfort. The following table serves as a guideline to standard sizing, custom sizes can be considered upon request.

Available size range:

GARMENT SIZE	HEIGHT (in/cm)	WEIGHT (lb/kg)
S	62-64/157-163	90-130/41-59
M	64-66/163-168	130-170/59-77
L	66-69/168-175	170-210/77-95
XL	69-71/175-180	210-235/95-107
2XL	71-74/180-188	235-260/107-118
3XM	74-76/188-193	260-290/118-132
NOTE: The data refers to a wearer without SCBA or any other equipment.		

Materials

Suit part/Component	Description
Garment material:	AlphaTec™ 66-600 Series garments are constructed with Stedfast Stedair® protective barrier fabrics, available in two variations. Red polyester garments: White polyester inner / Stedair® membrane / red polyester outer Blue FR garments made with Nomex® fiber*: White Nomex® inner / Stedair® membrane / Blue Nomex® outer
* Material meets additional requirements according to NFPA 2112, Standard on Flame-Resistant Clothing for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire, 2023 Edition.	

Suit part/Component	Description
Zipper/Closure material	All AlphaTec 66-600 Series jackets, coats and coveralls have heavy duty zippers. Placed on the front of the garments and protected by a double storm flap with hook-and-loop closures.
Type: Length: Tape: Chain: Slide: Pull:	Red polyester jacket: VFO-106 (Open-end one-way Separator zipper) Size S-XL: 24 in; Size 2XL: 25 in; Size 3XL: 26 in Polyester Plastic Metal Metal
Type: Length: Tape: Chain: Slide: Pull:	Red polyester coat: VFMO-106 (Open-end two-way Separator zipper) Size S: 24 in; Size M: 26 in; Size L: 28 in; Size XL-3XL: 30 in Polyester Plastic Metal Metal
Type: Length: Tape: Chain: Slide: Pull:	Red polyester coverall: VFC-106 (No.10 Plastic, one-way close end zipper) Size S-M: 24 in; Size L: 25 in; Size XL-2XL: 26 in; Size 3XL: 28 in Polyester Plastic Metal Metal
Type: Length: Tape: Chain: Slide: Pull:	Blue FR jacket: VFO-106FR (Open-end one-way Separator zipper) Size S-XL: 24 in; Size 2XL: 25 in; Size 3XL: 26 in Nomex® Tape Plastic Metal Metal
Type: Length: Tape: Chain: Slide: Pull:	Blue FR coat: VFMO-106FR (Open-end two-way separator zipper) Size S: 24 in; Size M: 26 in; Size L: 28 in; Size XL-3XL: 30 in Nomex® Tape Plastic Metal Metal
Type: Length: Tape: Chain: Slide: Pull:	Blue FR coverall: VFC-106FR (No.10 Plastic, one-way close end zipper) Size S-M: 24 in; Size L: 25 in; Size XL-2XL: 26 in; Size 3XL: 28 in Nomex® Tape Plastic Metal Metal

Seam types & attachments

Seam/Attachment	Description
Garment material/ garment material seam: Thread: Polyester/Cotton Sealing tape: Stedair® 3-ply laminate Thread: Nomex®, ticket size 30/3 Sealing tape: Stedair® Nomex® 3-ply laminate	Stitched and heat sealed with Stedfast sealing tape to protect against liquid penetration: Red polyester garments: Blue FR garments: Thread: Nomex®, ticket size 30/3 Sealing tape: Stedair® Nomex® 3-ply laminate
Garment material/ suit closure seam: Thread: Polyester/Cotton Sealing tape: Stedair® 3-ply laminate Thread: Nomex®, ticket size 30/3 Sealing tape: Stedair® Nomex® 3-ply laminate	The zipper is stitched to the garment and heat sealed with Stedfast sealing tape to protect against liquid penetration Red polyester garments: Thread: Polyester/Cotton Sealing tape: Stedair® 3-ply laminate Blue FR garments: Thread: Nomex®, ticket size 30/3 Sealing tape: Stedair® Nomex® 3-ply laminate

NFPA 2112-2023 Approval Data

GARMENT MATERIAL TESTED: AlphaTec™ Breathable FR (Blue)				
Ensemble or Element	Performance Requirement	Test Method	Requirement	Result
Garment material	Heat Transfer Performance Test (HTP)	Section 8.2	Spaced, > 6.0 cal cm ⁻²	As received/after 3 launderings 19.6/20.3
			Contact, > 3.0 cal cm ⁻²	As received/after 3 launderings 11.8 / 13.0
	Flame resistance	Section 8.3 (ASTM D6413 apparatus)	After flame: max 2 sec Char length: max 100 mm	After flame: average 0 sec Char length: 67/17 mm (M/XM)
	Heat and thermal shrinkage resistance	Section 8.4 (ASTM F2894 apparatus)	Max -10 %	-3/-2 % (M/XM)
	Manikin test predicted % total body burn	Section 8.5	≤ 50	11%