

Ergodyne N-Ferno® FR Balaclavas and Neck Gaiters

Important Information Regarding Flame-Resistant Garments certified to NFPA 2112-2023 for Flame-Resistant Clothing For Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire.

User Information

DANGER – Read this User Information Guide carefully. All of the instructions contained in it are intended to warn you of potential risks of serious injury and death and to reduce such risks. If they are not heeded and followed, the risk of serious injury or death will increase. No garments can ensure you avoid all serious injuries or death. It is your responsibility to familiarize yourself with this User Information Guide and to use your garments in accordance with its instructions.

Introduction

This User Information Guide gives important information regarding the use, care, and maintenance of your flame resistant garment. Upon receipt and inspection of the garment, you should thoroughly read this User Information Guide and refer to it as needed for continued safe use of your garment.

Warnings

This garment is intended to provide limited protection to you in the event of exposure during a flash fire resulting from the ignition of a hydrocarbon atmosphere or atmosphere containing combustible finely divided particles (such as coal dust or grain) that contains a concentration above the lower explosive limit of the chemical or substance. This garment will also provide limited protection to you in the event of an electrical arc flash.

This garment will not protect against any extended exposure to direct flame or high heat and is not intended for use in any firefighting or other emergency operations, including wildland firefighting, technical rescue, or structural firefighting. These garments will also not protect you from exposure to radiological agents, biological agents, or hazardous materials.

This garment alone will not protect you from all hazards. You or your employer must conduct a hazard and risk assessment to determine the suitability of this garment for its intended purpose. Additional garments or personal protective equipment may be necessary to provide you complete protection that includes, but is not limited to head protection, eye/face protection, hand protection, foot protection, respirators, hearing protection, fall protection, high visibility apparel, and other protective garments.

This garment will not protect you if not properly maintained. Do not use this garment if soiled, contaminated, or damaged. Soiling and contamination of this garment may render this garment hazardous. Clean this garment in accordance with the instruction provided in this user information. If you have any doubt about the condition of this garment, do not wear it and have it replaced.

You must be trained in recognizing hazards in your specific trade and understand the limitations of use for this garment prior to wearing it. Even though the garment is constructed of flame resistant materials, this garment will not protect you from being burned under all conditions of use or exposure to hazards. Failure to understand the limitations of these limitations may result in a serious injury or death.

Sizing and Fit

Choose a flame-resistant garment that properly fits you. The garment should not be too tight or too loose, should not restrict your movement or sight and should be comfortable to wear. The recommended head dimensions for balaclavas are provided in the tables below.

Balaclava

Minimum Head Circumference: 49cm (6 1/8 hat size)

Maximum Head Circumference: 65cm (8 1/8 hat size)

Garment Length: 17.5" (44.5cm)

Neck Gaiter

Garment length: 30cm.

Minimum Head Circumference: 58CM

Maximum Head Circumference: 70CM

Garment Marking and Emblems

The use of non-flame or non-heat resistant emblems, shields or patches, embroidery, silkscreens, and heat transfers used to designate a specific organization, title, position, or other professional status, etc. should be minimized. If used, the size of these items should be relatively small (less than the size of a business card) and may still compromise your garment in the event of a flash fire or electrical arc exposure.

For marking of these garments, it is recommended that any identifications be provided on the interior side of the garment. For hand written marking, an industrial laundry marker may be used.

Donning and Doffing Procedures: Balaclava

This garment is a headwear accessory with a primary purpose of protecting the side of the face, the back of the neck, and the front of the neck. It should be worn and removed in the following manner:

1. Once all other required PPE is on, place the balaclava over the top of your head with the opening at the front.
2. Pull the balaclava on gently over your head until the fabric covers your head completely.
3. Continue to roll the balaclava down until fabric is fully extended to your neck and/or shoulders.
4. Adjust the balaclava opening to ensure your sight is not compromised.
5. Either tuck the bottom fabric under your shirt or outerwear OR wear it over the top of your undergarments.

After use, when you are in a safe area, remove the balaclava first by:

1. Remove any gloves and/or wash hands if they have any contaminants or hazardous material on them.
2. Grab the fabric from the bottom, near the neck and shoulders, and pull fabric away from the body.
3. Gently pull the garment over the head.

Donning and Doffing Procedures: Neck Gaiter

This garment is an accessory with a primary purpose of protecting the back of the neck, the front of the neck, and the front of the face. It should be worn and removed in the following manner:

1. Once all other required PPE is on, place the neck gaiter over the top of your head.
2. Pull the neck gaiter on gently over your head until the fabric covers your neck completely.
3. The neck gaiter can either be worn around the neck, or lifted over the nose for face protection.
4. Adjust the neck gaiter to ensure your sight is not compromised.
5. Either tuck the bottom fabric under your shirt or outerwear OR wear it over the top of your undergarments.

After use, when you are in a safe area, remove the neck gaiter first by:

1. Remove any gloves and/or wash hands if they have any contaminants or hazardous material on them.
2. Grab the fabric from the bottom, near the neck and shoulders, and pull fabric away from the body.
3. Gently pull the garment over the head.

Proper Use

Refer to NFPA 2113 for proper use information. The user is responsible to determine that this garment is appropriate for the intended use and complies with all laws and regulatory standards.

The user assumes all risks associated with the use of this product. Ergodyne shall not be liable or loss, injury, or death arising out of the use of this product.

Inspection and Repair

Periodically inspect your garment as follows:

- A. Inspect your garment upon receipt, at least once a month, before and after each use, cleaning and/or following any application where the garment has been subjected to damage or contamination. In the event of exposure to hazardous materials, isolate the garment and perform the inspection only after the garment has been decontaminated.
- B. Inspect all components for rips, tears, burn damage, and abrasion damage. Close attention should be paid to integrity of the thread and areas around the face.
- C. Physically inspect all seams for structural damage.
- D. If any component is found to be damaged or missing, remove the clothing from service and have it repaired or replaced.
- E. Inspect each article of clothing for the following types of wear or damage:

- Rips, tears, holes
- Brittle/stiff material
- Discoloration
- Charring
- Cleanliness
- Other Fabric damage
- Seam integrity
- Size and fit

Before any repairs are made to your garment, clean your garment in accordance with the instructions provided below.

All repairs to Ergodyne flame-resistant garments should be done at an authorized facility. Contact Ergodyne toll free at 800.225.8238 to speak to a customer service representative to coordinate the return and repair of the item.

Unauthorized repairs made to Ergodyne flame-resistant garments invalidates all expressed or implied warranties and increases your risk for injury to hazardous or life threatening conditions.

Storage

After the garment has been cleaned and inspected, store your garments in a place that will protect them from direct sunlight heat and excessive moisture. Never store your garments in direct sunlight, as this condition may cause permanent damage. Avoid prolonged exposure to sunlight. Exposure to ultraviolet light will cause the garment to lose tensile strength. Once started, there is no way to repair this type of deterioration. Wet garments will promote the growth of mildew and fungus, which will permanently damage your garments.

Cleaning Requirements

- A. Do not dry clean. Solvents may damage your garment.
- B. Never use chlorine bleach on this station/work uniform under any condition. Chlorine bleaches may discolor the fabrics, and cause garment materials to lose their performance characteristics, such as flame resistance, strength, etc.
- C. Do not use fabric softeners. Fabric softeners are oil based and can contribute to fabric flammability.
- D. Do not use automatic dryers. Hot drying temperatures or extended drying time will cause greater material shrinkage.
- E. Do not use hot water (over 120°F or 49°C). Overly hot water may cause excessive material shrinkage.
- F. Keep protective garments clean. The garment's life expectancy and flame resistance (if FR uniform) increases if abrasive, flammable dirt and contaminants are removed after each use. Garments contaminated with unburned byproducts of combustion, as well as other flammable contaminants, may negate the ability of clothing to resist flame, and may not only ignite, but the garment may also continue to burn when it would normally self-extinguish.

Home Machine Washing Instructions

- A. Turn the flame-resistant garments inside and wash separately from other clothing. The use of home-based washers and washers used by the public are not recommended in order to prevent the spread of contamination to other laundry items.
- B. These instructions can be applied to washing a number of clothing items in the same load. The load size will depend on the machine type and its capacity. Most machines indicate that the load should be no more than 75 to 80% of the machine capacity. For example, a typical home style machine can accommodate up to 12 shirts, 4 pants, 3 sets of pants and shirts, or 5 lightweight jackets.
- C. While the washing machine is filling up with warm water (temperature at $86^{\circ}\text{F} \pm 5^{\circ}\text{F}$ or $40^{\circ}\text{C} \pm 3^{\circ}\text{C}$), add 1 cup (8 oz.) of liquid or powder laundry detergent to the machine. Use $1\frac{1}{2}$ cups of mild detergent if wash water is considered very hard. These detergents are readily available in supermarkets around the country.
- D. Fill the washing machine to the highest level.
- E. Add garments to be washed.
- F. Set washing machine to “normal cycle” or similar setting and double rinse.
- G. If garments are laundered at outside laundering facilities, the same procedures must be followed to avoid damaging the garments.

Home Drying Instructions

- A. For best results, allow garment to air dry.
- B. Machine drying is not recommended.

Ironing

If needed, use a warm iron to remove wrinkles.

External or Institutional Cleaning Services

If outside organizations are used to clean your flame-resistant garments, ensure that the washing and drying procedures are effective in removing soils and other contaminants while not adversely affecting the condition and performance of your garments. These services should use some form of traceability for determining how many times your flame-resistant garment has been cleaned.

Cleaning Blood or Body Fluid Contaminated Garments

Contaminated garments should not be laundered at home. Flame-resistant garments that are obviously contaminated by large amounts of blood or body fluids must be placed and transported in suitable bags that prevent leakage. Personnel involved in the bagging, transport, and laundering of contaminated clothing must wear appropriate protective gloves, aprons and eye/face protection. Separately wash garments in a front loading industrial size washing machine with a liquid or powder laundry detergent at a water temperature of 105°F (40°C) for at least 25 minutes, and use multiple rinse cycles. Use of bleach may compromise the structural integrity of the garment and therefore must never be used. Dry as noted above “Home Machine Drying Instructions.” Do not use disinfectants, sanitizing agents, or other specialty chemicals unless their use has been adequately demonstrated for removal of pathogenic bacteria and their use will not damage your garments.

Removal of Hazardous Materials

Garments contaminated from hazardous or caustic materials, such as solvents, liquids, dusts, mists, fumes, and vapors, must be immediately removed from service and retired as directed below in “Retirement and Disposal”.

Unless it can be demonstrated by a qualified, competent authority that the garments can be properly decontaminated and are safe for reuse, your garments must be retired.

Do not use any decontamination agent or process unless it has been adequately demonstrated that its use will not damage your garments.

Retirement and Disposal

You must realize that these flame resistant garments do not have an indefinite useful life.

Ergodyne recommends that a regular garment replacement program be conducted by your organization to address the useful service life of these garments. Details of such a program must be developed based on previous experience in the organization as it is impossible to provide a specific time frame for garment replacement. Other retirement considerations should include:

- A. Garments that have been affected by sunlight, ultraviolet light, or general reuse to the point where the fabrics become stiff or weak;
- B. Garments that have been affected by improper care procedures; and
- C. Garments that have been exposed to hazardous or caustic materials that cannot be safely decontaminated.

Flame-resistant that have to be retired from service should be destroyed so that they cannot be reused. One suggested method of disposal is cut clothing into pieces and check with your local or state requirements for appropriate methods of disposal since it is possible that contaminants may be present on the garments.

Warranty

We stand behind everything we make and guarantee our products to be free of defects in materials and workmanship to the original purchaser for the lifetime of the product. Damage, abuse, and/or normal wear are not covered. Questions? Call Ergodyne at +1-651-642-9889 (8am-5pm CST).