



BALLYCLARE™

**CARING FOR YOUR
BALLYCLARE FIREWEAR**

Issue 2

Ballyclare is delighted you have chosen to purchase our high-quality firewear.

It gives you maximum protection against heat and moisture combined with the latest garment ergonomics to create an extremely comfortable product.

To meet your expectations, we only use state-of the-art raw materials to craft our turnout gear, nevertheless, it requires correct maintenance and care to keep it working properly for as long as possible.

Correct maintenance and care are essential to extending its life, so kindly adhere to our care recommendations, adjust your washing program accordingly or pass on this information to your external laundry partner.

The protective clothing is made of flame retardant materials, the flame retardant properties belong to the inherent characteristics of the fibers and materials, which means they do not lose their flame resistance. All the same, improper treatment during cleaning can impair or even severely damage the mechanical properties. Before you start cleaning your new Ballyclare turnout gear, you should first conduct a series of tests or commission the external laundry firm to do so.

Oil, grease, and dust deposits on the surface may catch fire and impair the performance of the protective clothing.

The turnout gear needs to be washed separately to prevent foreign matter (e.g. fluff) from bonding with the surface. To ensure cross-contamination cannot take place, for instance between 'service apparel' and 'sports clothing', you must only wash it in a washing machine designated specifically for this purpose.

In this document you will find our instructions to care about your Ballyclare fire kit. If you have any questions on care and maintenance please contact us.

WASHING PROCESSES

Ballyclare turnout clothing is suitable for washing in professional washing machines based on household laundry. Washing is preferable to dry cleaning, as body fluids are not as thoroughly removed during the dry cleaning process. If there is no other possibility, then dry cleaning is allowed.

Washing at home is strongly discouraged because of the drum capacity, but also because of hygiene in a domestic environment. Firefighters clothing encounters various substances and (body) fluids that must be handled in a professional environment.

Hand washing is prohibited.

WASHING MACHINE

The turnout gear must only be washed in the designated washing machine. For the reason of tumble capacity and to prevent cross-contamination (hygiene) - do not use household appliances.

Machines with > 15 kg washing drum are recommended to ensure sufficient drum capacity for your clothing. Overloading the drum capacity leads to mechanical damage to the clothing. Load the machine to half the capacity and select a washing program that applies a higher water level.

WASHING SYMBOLS

You will find the following washing symbols in the care label of your Ballyclare clothing:



Symbol	Explanation
 	Normal wash, 40 or 60 °C
	No bleaching
	Drying in tumble dryer high temperature (80°C outlet temperature)
	Low temperature ironing (ca 110°C)
	No dry cleaning

SORTING

Sort the wash by color and degree of contamination. To prevent cross-contamination, firefighting clothing must be washed separately from other clothing. Before washing, all shoulder pieces, name badges, hooks etc. should be removed and bags emptied. Close all fasteners and Velcro to avoid local damage (wear and pilling).

LOADING

Excessive friction between materials can occur due to overloading of the drum capacity. Especially in wet conditions this can lead to premature wear and tear. The recommended loading level is 50-60% of the drum capacity. We recommend a front loader without an agitator. Top loaders with agitators can cause damage to the garments.

WASH TEMPERATURE

For optimisation of the lifespan, we recommend washing temperature between 40-60°C. Highly contaminated clothing should be washed separately, possibly with an appropriate program including prewash. When clothing should be exposed to higher washing temperatures - for example disinfection - we select materials that can be cleaned at such temperatures. Your clothing contains other symbols on the label, and you receive additional information / special washing advice.

DETERGENT

Use a mild detergent without any optical brighteners, bleaches, or integrated fabric softener. Do not use concentrated detergents. Do not use soap, which can produce a flammable scum residue in hard water.

Concentrated acids (e.g. acetic acid), alkalis or powerful oxidants (e.g. hypochlorite and other chlorine-based bleaches), impair the mechanical properties of the firewear. Avoid exposing the apparel to very low (<2) or very high (>10) pH values during laundry cycles. The pH value of the solution should be 8–9.

We endorse the following detergents (without accepting liability):

- Clax 100S
- Clax Plus
- Ecolab Turbo Usona
- Seitz Viva Sensitive
- Triplex Energy Plus
- Kreussler Derval Rent (detergent) and Derval Protect (booster).

This list is not complete - we recommend conducting a test cycle.

BLEACH

Bleaches, especially if chlorine-based, can damage the dye, textile fibers and the fluorescent stripes.

PREWASH

Severely soiled apparel or garments that have been soaked with flammable substances may require several treatments. Rinse them and place them in an additional pre-wash cycle with suitable surfactants/grease solvents. Multiple pre-wash cycles may be required.

CAUTION: BODILY FLUIDS AND ASBESTOS

Turnout gear contaminated with bodily fluids and / or asbestos must not be cleaned using a standard washing process. It must be kept separate (in a polybag) and cleaned in a separate cycle using a suitable washing process.

HEAVILY SOILED GARMENTS

For standard washing, wash at 40°C and follow the care instructions on the garment label - this will provide garment longevity. For heavily soiled garments follow the procedure below:

- Select a program with pre-wash and a main cycle for severely soiled apparel.
- The pre-wash should be at 50–60°C with a water ratio (laundry weight: water volume) of between 1:5 and 1:6, based on a maximum load of 50% capacity.
- The main cycle should be at 60°C with a water ratio of 1:4.

RINSING, SPINNING and DRYING

Rinse all garments thoroughly after washing to remove all traces of detergents.

Apparel with membranes must not be put through the spin cycle or only spun gently if suitable. They must then be placed in the tumble dryer (gentle cycle) and dried at initial drum temperatures of no more than 60°C or in a drying cabinet. Drying in a drying chamber gives less mechanical friction between materials and therefore less wear.

Tumble or cabinet drying is necessary to activate the current or newly applied impregnation.

Do not hang the turnout gear on a washing line if exposed to direct sunlight, as doing so may damage the material.

REPELLENT FINISH

The outer material in Ballyclare turnout gear is always impregnated with a water and oil repellent finish to meet the requirements of EN 469.

This finish is applied to the clothing during the production of the outer fabric and is not permanent. There are, however, standard finishes (short life) and durable (long-term) finishes. Both can and must be maintained during the washing process to provide protection throughout the life cycle.

Mechanical stress, frequency of use and weather conditions affect the impregnation applied to the outer material. For this reason, a visual inspection must be performed after each wash cycle. By allowing water drops to run on the clothes, a quick and simple check can be made to see if the finish is working.

NOTE: Water repellence, however, is different from chemical resistance; Many chemicals have a lower surface tension and penetrate faster than water. A more accurate assessment is to test based on an oil drop test (EN ISO 144119) (oil has a low surface tension). When value 5 is achieved, it can be assumed that the chemicals from EN 469 are also sufficiently rejected. The oil drop test is a simple test and test oils are safe and standard available on the market.

Standard Finish

To maintain the chemical repellent properties, we recommend a reapplication of the finish on the outer material. For the most optimal resistance, we recommend a reapplication in each wash.

The clothing should be adequately rinsed to remove chemical detergents; detergent residues disrupt the peeling action of the finish.

Add a fluorocarbon finishing (FC) agent to the final rinse cycle and then dry in the tumble dryer or drying cabinet to activate the necessary re-impregnation.

In the case of reapplication, the outer layer should receive a heat shock to optimally activate the finish. It must be protected against over-drying. Heat and time are required for an optimal repellent result. Over-drying is critical for shrinkage. This makes drying an accurate process.

Your detergent supplier has the right detergents and process setting for your machines and processes.

We endorse the following re-impregnation agents (without accepting liability):

- Clax Proof Integral
- Ecolab Saprit Protect Plus
- Kreussler Hydrob Easydry
- Christeyns Osmafin Aquablock Free and Osmafin Aquablock Triple.

This list is not complete - we recommend conducting a test cycle.

Durable finish

Some of the outer materials Ballyclare use in its turnout gear are equipped with a durable oil and water-repellent impregnation. It may require re-impregnation after 30 or 40 wash cycles, depending on the outer material. After this number of washes, reapplication should be started as described under Standard Finish. This with the recommendation to repeat every wash.

To activate the durable finish, it is very important that the clothes are properly dried. The outer material should get a heat shock to activate the finish after washing. (See under Standard Finish)

Timely reapplication is essential to ensure the protective properties of clothing. The number of washes can be monitored by means of barcode scanning or RFID and the moment of reapplication can be determined.

Consideration: Depending on the frequency of washing and the logistical process, you can choose to replace the clothing after the durable finish. This is not technically necessary, but can offer advantages from a logistical point of view, because not all clothing must be started simultaneously and there can be half loadings during washing and drying.

DRY CLEANING

Washing as described above should be given precedence over dry cleaning. If there is no other alternative, dry cleaning with industry-standard tetrachloroethylene or hydrocarbons can be performed.

Do not use detergent, additives, or pure solvents to prevent the retention of flammable residues, as this will impair the protective properties of the garment.

Make certain that all solvents have been eliminated from the apparel during drying before reusing the garment.

To prevent changes in the material, ensure all detergents remain within the specific pH range (stated earlier).

For activation of the repellent finish, the outer material should be placed in a tumble dryer or drying room / cabinet.

PRODUCT CARE

It is possible that certain garment damage can be repaired using the same inherently flame-retardant materials used in original manufacture. In case of uncertainty please contact Ballyclare.

Inadequate removal of contaminants may drastically reduce the heat and flame protection offered.

Regular checks for contaminants are essential. In the event of accidental splash of chemical or flammable liquids on this garment, the wearer should immediately withdraw and remove the garment, which should then be cleaned or removed from service.

Garments must be bagged, quarantined and professionally laundered if they become contaminated with blood, organic staining or asbestos.

To clean the equipment when it is exposed to serious contamination such as blood, body fluids, pitch, fuel and soot. If possible, rinse with water at the place of use to remove contamination.

STORAGE

- Always store in clean, dry conditions.
- DO NOT store in wet or damp conditions.
- DO NOT store in direct (sun)light.
- All garments should not be stored in the original packaging for more than 3 years.

Recommendations for storing garments from new, or garments that have been stored in original packaging for up to 3 years:

- Hang garments covered (not in translucent bags) and out of direct (sun)light in a well-ventilated area.
- Where this is not practical, we recommend removing the garments from packaging, re-fold loosely, place on shelves and cover with air permeable fabric, dust sheets or ventilated dark-coloured bags in well-ventilated area. Increasing the ventilation around the garment is most desirable.
- Remove from black plastic bags, re-fold loosely and store in ventilated cardboard boxes, (store User Information Sheet and black plastic bag with garment).

INNOCUOUSNESS

To the best of our knowledge the materials and components utilised in the manufacture of these garments do not contain any substances known to adversely affect user hygiene or health.

END OF LIFE

Our garments are also suitable for disposal via landfill in accordance with European standards . At end of life we regularly donate used but serviceable fire kit for use in undeveloped countries.



The company operates to the highest standards and is Accredited to the quality standard BS EN ISO 9001:2015 and the environmental management standard BS EN ISO 14001:2015.

Ballyclare is a verified member of BSIF (British Safety Industry Federation) and is a BSIF Registered Safety Supplier. It is proud to be a Platinum Partner of the National Fire Chiefs Council (NFCC) and the Chief Fire Officers Association (CFOA), as well a member of the Fire Industry Association.

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