



**CARE AND
MAINTENANCE
GUIDELINES**

HOME CARE GUIDELINES

Garments made with Westex AllOut® coatings can be laundered at home using conventional home washing and drying methods using wash temperatures at or below 120°F, followed by hand ironing on a low setting if necessary. No special technology is needed. However, home procedures may not remove the last traces of very heavy, widespread or ground-in soils, which may be flammable and could adversely affect the thermal protective performance of garments. If home laundering does not remove such build-up, garments can be commercially laundered.

When garments are contaminated by hazardous materials, only commercial laundering should be used, along with the appropriate wastewater treatment techniques. Chemical exposure may affect the flame resistant properties and should be evaluated by the user's standard safety protocol procedures.

The following procedures are recommended for optimum cleaning:

A flash fire is a short-duration rapidly moving flame front, which can be a combustion explosion. A flash fire may occur in an environment where fuel and air become mixed in adequate concentrations to combust. Flame resistant (FR) clothing will minimize burn injury and provide the worker a few seconds of escape time. Non-flame resistant clothing can ignite in a flash fire exposure, providing an additional fuel source and dramatically increasing the burn injury extent and severity well beyond that of the initial exposure. Two of the flammability requirements of the NFPA 2112 Flash Fire Standard are the NFPA D6413 Vertical Flame Test and the ASTM F1930 Instrumented Manikin Test.



SORTING

Garments of Westex AllOut® coated fabric should be sorted and washed separately from other garments to prevent contamination with lint of flammable fibers.



PRETREATING

Stains, as well as deep soil lines on the collars and cuffs of garments, are more readily removed if pretreated. Stains should be pretreated at the earliest opportunity and sufficient time allowed for the pretreatment material to penetrate and loosen the soil. The heavily soiled or stained areas should be rubbed with a full strength, heavy-duty liquid detergent or any off-the-shelf laundry pretreatment product. Do not use detergents containing chlorine bleach.



GARMENT PREPARATION

Before laundering garments of Westex AllOut® coated fabrics, pockets should be emptied, cuffs cleaned out and zippers closed.



LOAD SIZE

When laundering garments made with Westex AllOut® coated fabrics, it is important not to overload the machine. To ensure a cleaner wash and avoid setting wash wrinkles, the load size must permit clothes to move freely through the wash water and rinse cycle. Regardless of the machine's rated capacity in pounds, bulk – not weight – should be the limiting factor.



WASH WATER TEMPERATURE

Moderate soil levels may be removed adequately at normal wash water temperature settings. Heavily soiled and stained garments require a higher wash temperature setting. A maximum wash temperature of 120°F is recommended for best durability and appearance.



DETERGENTS

Synthetic, heavy-duty liquid laundry detergents are recommended for washing. These products do a superior job of removing soils and are less likely than soap to form sticky deposits of lime soap curds, which are difficult to rinse out. Fatty-based soaps should not be used. Soaps can form insoluble scums with hard water that are deposited on the fabric. Soap scums may be flammable, and can adversely affect the thermal protection performance of the garment if they burn. Under-use of detergent results in poor soil removal and frequently causes suspended soils to redeposit on the clothes. Failure to use a sufficient amount of detergent is the single greatest cause of inadequate home cleaning. Do not use detergents containing chlorine bleach. Do not use starches, fabric softeners, or any other laundry additives.



WATER

For best results, an adequate supply of “soft” water is required for home laundering garments of Westex AllOut® coated fabric. Hard water contains minerals, such as calcium and magnesium salts, that combine with fatty based soaps to form insoluble films. These insoluble contaminants are difficult to rinse from fabrics, may be flammable and could adversely affect the thermal protective performance of garments if not adequately removed. Soap is not recommended, but if it is used in hard wash water (more than approximately 7 grains per gallon or 120 parts per million), a non-precipitating type water conditioner should be added. Softening the water reduces soap consumption and improves the quality of washing.



BLEACHES

The use of bleach is NOT recommended for Westex AllOut® coated garments as over-use can degrade the fabric. Hydrogen peroxide, which is an oxygen bleach, must not be used on garments made with Allout® fabrics, either separately or in detergents. The presence of metals with hydrogen peroxide can adversely affect the flame resistance of the fabric.

Chlorine bleach (sodium hypochlorite) must not be used on garments made with Allout® fabrics, either separately or in detergents. Chlorine bleach can adversely affect the flame resistance of the fabric. Review of various laundry advisories generally prohibits the use of chlorine bleach for protective fabrics of any fiber composition.



TUMBLE DRYING

Garments made with Westex AllOut® coated fabric should be dried using the minimum temperature setting required to dry clothing in a practical time. Use permanent press setting with cool-down cycle if possible. To ensure maximum removal of wrinkles, tumble dryers should not be overloaded.

Drying time varies with the nature and size of the load. When tumble dried at the medium or high temperature setting, a properly sized load usually dries in approximately 20 minutes. Dry garments inside out to minimize edge and surface abrasion. Remove clothes immediately when dry or when slightly damp to minimize shrinkage. In the latter case, hang to complete drying. Do not overdry, as this leads to excessive shrinkage.



IRONING

If garments made with Westex AllOut® coated fabric need touch-up pressing, a steam or dry iron may be used at the medium setting.



DRY CLEANING

Do not dry clean garments made with Westex AllOut® coated fabrics.

ADDITIONAL GENERAL GUIDELINES FOR INDUSTRIAL LAUNDRY

Although it is recommended that Westex AllOut® coated fabrics be laundered at or below 120°F it may be necessary to use a commercial laundry to remove hazardous material contaminants. Westex AllOut® coated fabrics maintain their FR performance for the useful life of the garment when washed according to care instructions. During commercial / industrial laundering, it is recommended to wash garments according to the NFPA 2112 guidelines at a maximum wash temperature of 150°F. A 120°F maximum wash temperature is recommended to maximize the longevity of the Westex AllOut® coating water repellency and wind resistance properties, as well as maintaining the best durability, colorfastness and garment appearance. Wash FR garments separately from other garments. Use the correct water level for the load and do not overload the machine. When drying, do not over dry the garment. Do not use starch.

FOR MORE INFORMATION CONTACT:

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