

# Laundrying Arc Flash Garments

### GENERAL GUIDELINES

*Proper cleaning and care of your garments will ensure maximum effectiveness and long life.* Garments made of FR fabrics can be washed and dried by any conventional home method, followed by hand ironing if necessary. No special technology is needed for home laundrying garments of FR nature. 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 FR fabric garments.

If home laundrying does not remove contaminants or contaminant build-up, garments can be periodically dry cleaned or commercially laundered. When garments are contaminated by hazardous materials, only commercial or on-site laundrying or dry cleaning should be used with the appropriate wastewater treatment techniques.

**The following procedures can help provide optimum cleaning. ALWAYS consult individual garments for laundrying instructions.**

#### Sorting

FR fabric garments 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 full-strength, heavy-duty liquid detergent or any off-the-shelf laundry pretreatment product.

#### Preparing the Wash Load

Before laundrying FR fabric garments, pockets should be emptied, pants cuffs cleaned out and zippers closed. It is recommended wash garments inside out before washing to reduce streaking from abrasion.

#### Load Size

When laundrying FR fabric garments, it is important not to overload the machine. To ensure a cleaner wash and avoid setting wash wrinkles, the load size must permit clothing to move freely through the wash water and rinse cycle. Regardless of the machine's rating 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 of FR fabrics require a higher water temperature setting.

#### Detergents

Synthetic, heavy-duty liquid laundry detergents are recommended for washing FR fabric garments. These "designed" 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. 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. NEVER use bleach or fabric softener.

#### Water and Water Conditioners

For best results, an adequate supply of "soft" water is required for home laundrying garments of FR fabrics. "Hard" water contains minerals, such as calcium and magnesium salts, that combine with fatty-based soaps to form insoluble film, scum or curd. 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 7 grains/gal., 120 mg/L or 120 ppm), a nonprecipitating-type water reduces soap consumption and improves the quality of washing.