



Care & Cleaning Information for Bulwark Molten Metal Splash Resistant Garments

The highly engineered fabric in these garments provides a soft, lightweight feel, but protects against molten metal splash, radiant heat, flame and other smelting hazards. Because the fabric is permanently flame resistant, laundering cannot degrade this property.

Providing protection from both red and white molten splash, Bulwark molten metal splash resistant garments also provide protection from cryolite (Na_3AlF_6), a catalyst used in aluminum smelters or pot rooms.

Flame resistant garments should be removed immediately and replaced with clean FR apparel if they become fouled with flammable materials.

Flame resistant apparel should be washed using soft water (less than 4.0 grains). Hard water adversely affects cleaning, resulting in increased detergent usage. Hard water contains mineral salts that can form insoluble deposits on the surface of fabrics. Sufficient buildup can negate the flame resistant characteristics of the garment, and may serve as fuel if garments are exposed to an ignition source.

These garments can be dry cleaned or laundered in home or industrial-type equipment at reduced wash and drying temperatures. Tunnel finishing may result in excessive shrinkage and is not recommended. Because of the wide variety of equipment and methods used for laundering garments, it is recommended that in-house trials be conducted to confirm that these garments can be successfully laundered in a particular environment. **Shrinkage of up to 6.5% may be expected; size garments accordingly.**

INDUSTRIAL LAUNDRY

- Heavily soiled garments or garments with oily stains may be pretreated. Dry cleaning may be more effective on these type stains.
- High surfactant, low alkalinity (pH of 6 to 8) detergents are recommended for best cleaning, color retention and shrinkage control. **Do not wash in hot water.** Wash temperatures of 105°F or less are recommended. Avoid long wash and rinse cycles. Reduce cycle times to the minimum needed for adequate soil removal. Use high water levels during washing and rinsing. Rinse thoroughly in cold water.
- **Do not rotate the washer load between draining and filling to avoid stretching wet garments.**
- Do not use natural soaps (anionic or tallow soap). Soft water is recommended.
- Do not bleach. Bleach may damage the garments. Do not use starch or fabric softeners as these products may coat fibers and mask FR performance and/or serve as fuel in the event of garment ignition.
- Extract at low speed only (less than 100 "G's") for as short a time as necessary to remove free water.
- Condition at a stack setting not to exceed 150°F. Condition to about 35% moisture retention. Steam heated dryers are recommended. No not over dry. Normal shrinkage of up to 6.5 % can be expected.
- A maximum fabric temperature of 250°F is recommended at conditioning, tunnel finishing, and pressing.

HOME WASH

- Use any typical home laundry detergent. Do not use tallow soap (anionic detergent).
- Do not use bleach. Do not use starch or fabric softeners as these may coat fibers and mask FR performance and/or serve as fuel in the event of garment ignition.
- Wash on Permanent Press or Gentle cycle with warm or cold water. Water temperatures of 105°F or less are recommended.
- Tumble dry low/delicate and remove promptly.

DRY CLEAN

- Either perchloroethylene or petroleum solvent can be used. With petroleum, ensure all solvent has been completely dried from the garments.

REPAIR & MENDING

- Minor repairs not affecting the integrity of garments may be made with like materials by either heat sealing or sewing on patches or darning small holes.

The information in this bulletin is based on the results of testing in our laboratory and information from the fabric vendor. It is provided for your guidance and knowledge. As of the publication date, this bulletin contains up to date information on care and cleaning. Please visit our website at www.bulwark.com for the latest information.