When it comes to fire hazards, it’s best to be as safe as possible. Many businesses and industries do work that poses a risk of minor to severe burns, blindness, or other fire safety hazards. Some fire hazard risks can be minimized with training such as fire safety and injury prevention, keeping fire extinguishers handy, and making sure your workplace is OSHA compliant and up to date with general safety guidelines. For environments that put workers in contact with explosive gases or particles, electrical hazards, and sparks or flames, fire-resistant or arc flash-rated clothing is another essential part of fire safety.

**FR clothing basics**

FR clothing protects its wearer by reacting to heat and fire differently than ordinary clothing. FR materials resist ignition (if they do ignite, they self-extinguish quickly) and don’t melt onto skin and cause further injuries. FR gear is also designed to be tear and break resistant as well as thermally insulated.

The weight, texture, weave, and color matters when it comes to the amount of heat an FR garment can resist, but flame-resistant fibers are really what makes clothing FR. Whether the fibers are inherent, treated, or a combination of the two, what matters is that the clothing is properly engineered for your industry and that the FR properties last through laundering and stress.

**How to wash FR clothing**

FR garments aren’t the same as regular clothing and require specific washing instructions to maintain their effectiveness. Proper care of your garments will protect your employees and save you money by keeping your garments in good condition. The care recommendations from the product manufacturer should always be the first place you look before you wash your FR garments, and you should always follow those instructions.

While FR properties can’t be washed out of clothing, as long as you’re following the manufacturer’s guidelines, some chemicals used at work and in the laundry can compromise those properties. Avoid using insect repellent — especially any containing DEET — on FR clothing, and avoid anti-static or wrinkle-free dryer sheets, fabric softeners, starch, or chlorine bleach when laundering FR clothing.

**Repairing FR clothing**

Inspect your FR clothing before every shift like you would any other piece of equipment: any garment that has any of these signs of damage should be reported to a manager and removed from service at least temporarily:

- Thinning or torn fabric, including holes, tears, cuts, burn marks, and everyday wear and abrasion (especially in joints like the knees, elbows, and shoulders)
- Nonfunctioning zippers, pockets, buttons, seams, or other elements
- Significant alterations, including patches, stretching, or additional fabric not in the original design
- Garments that are too large, too small, or otherwise uncomfortable
- Any spots or stains that are permanent and can’t be removed with cleaning, such as those from various industrial chemicals

**When to replace FR clothing**

Like any other garment or piece of equipment, FR clothing won’t last forever. It will eventually need to be replaced, and if the garment is beyond repair, this is your only choice to ensure worker safety. To avoid wearing out your garments too soon, take proper care of them. Store clean garments in a secure, dry, room-temperature location where they’ll be protected from pests and moisture. If an FR garment was involved in a flash fire or other short-duration thermal exposure, it should be removed from service and replaced.

You want your equipment to be working when it counts, and FR clothing is no exception. Fire-related worksite injuries are extremely dangerous, and protecting workers should always be your top concern.

Rick Pedley. PK Safety’s President and CEO, joined the family business in 1979. PK Safety, a supplier of occupational safety and personal protective equipment and manufacturer of their own new FR line Grit. https://www.pksafety.com/contact-us/.