

FR BURN PROFILES

To watch the burn demo, scan with a QR reader on your smart phone.



STANDARD POLYESTER MESH (Not Chemically Treated)



Standard polyester ANSI compliant mesh material ignites when exposed to flame and will continue to burn, melt and drip. It is not recommended for any environment where Arc, sparks or other fire hazards are present.

CHEMICALLY TREATED POLYESTER MESH



Indistinguishable from the standard polyester mesh, this material is chemically treated to self extinguish after the flame has been removed. The material will melt and drip and does not meet the ANSI requirements for "FR".

MODACRYLIC FR MATERIAL



Modacrylic is an inherently flame resistant fiber. It quickly extinguishes and will not melt or drip. The material blackens and contracts into a hard brittle consistency when exposed to flame or high heat. Meets ASTM F1506, ANSI 107 "FR" requirements and has an ATPV (Arc Thermal Performance Value) of 5.5 cal/cm², NFPA 70E[®] HRC (Hazard Risk Category) 1 Arc Rated.

MESH MODACRYLIC FR MATERIAL



Modacrylic is an inherently flame resistant fiber. It quickly extinguishes and will not melt or drip. The mesh material allows greater breathability than solid Modacrylic while still maintaining an HRC Category Arc rating of 1. Meets: ASTM F1506, ANSI 107 "FR" requirements, Arc Rating /ATPV 5.1 cal/cm², NFPA 70E[®] HRC (Hazard Risk Category) 1 Arc Rated.

FR SWEATSHIRT MATERIAL



FR 10.5 oz Modacrylic/Tencel[®] blended fabric provides warmth, comfort and protection from melting all at the same time. When exposed to flame, the material smolders, blackens and hardens without melting or dripping. Meets: ASTM F1506, ANSI 107 "FR" requirements, Arc/ATPV 11.3 cal/cm², NFPA 70E[®] HRC (Hazard Risk Category) 2 ARC Rated.

ANTI-STAT FR MATERIAL



Electrostatic dissipative carbon fiber strands are woven into the Modacrylic to form an Anti-Static material. Inherently flame resistant fiber quickly extinguishes and will not melt or drip. Available in both mesh and solid. Meets: ASTM F1506, ANSI 107 "FR" requirements, Arc/ATPV 5.1(Mesh) 6.3(solid) cal/cm², NFPA 70E[®] HRC (Hazard Risk Category) 1 Arc Rated, ANT-STAT Test Methods: FTS 191A Method 5931, EN1149-5:2008 and EN 1149-3:2004 (test method), Shirley Method 138: 2000.

ARC FLASH TESTING DEMO

Our FR products must pass an arc test, proving the flame resistance capabilities of



the garment. To witness an arc test in action scan the QR code with your smart phone or visit mlkishigo.com/products-fr.html.

STANDARDS & TESTING FOR ANSI 107 COMPLIANT FR GARMENTS

The ANSI standard has provided requirements for garment labeling. For the ANSI label to state "FR" or "Flame Resistance", the material must meet at least one of the below test methods in its entirety. At the present time, High-Visibility polyester material does not meet any of these requirements and therefore should not display "FR" or "Flame Resistance" on the ANSI label.

- NFPA 1971
- NFPA 1977
- NFPA 2112
- ASTM F1506-08
- ASTM F1891-06
- ASTM F2302-08
- ASTM F2733-09

Our products conform to the requirements of many of these testing standards; Primarily:

NFPA 70E: Titled Standard for Electrical Safety in the Workplace, NFPA 70E is a comprehensive standard that covers the safety requirements for employees working around high voltage electricity.

ASTM F1506: This performance specification covers the flame resistance of textile materials to be used for wearing apparel for use by electrical workers exposed to momentary electric arc and related thermal hazards.