

Characteristics	Method		Unit	Specification
Composition	ASTM D-629		%	100% cotton
Weave	Visual			Twill 2 x 1 "S"
Cutable Width	ASTM D-3774		inches	65 min.
Total Nominal Width	ASTM D-3774		inches	67
Weight	ASTM D-3776		oz / yd <sup>2</sup>	7 +/- 5%
Weaving count	ASTM D-3775	warp	yarns / inch	107 +/- 3
		weft	yarns / inch	44 +/- 2
Breaking strength	ASTM D-5034	warp	N	550 min
		weft	N	190 min
Tear strength	ASTM D-1424	warp	N	25 min
		weft	N	18 min
Dimensional change	AATCC-135	warp	%	0 +/- 3%
		weft	%	0 +/- 3%
Colorfastness to washing	AATCC-61	change	gray scale grade	4 min
		transference	gray scale grade	4 min
Colorfastness to perspiration	AATCC-15	acid	gray scale grade	4 min
		alkaline	gray scale grade	4 min
Colorfastness to crocking	AATCC-08	dry	gray scale grade	3 - 4 min
		wet	gray scale grade	3 min
Flame resistance after 100 cycles of washing and drying	ASTM D-6413 / NFPA 2112 Sec. 8.1		inches	4 max
Afterflame time	ASTM D-6413		seconds	2 max
Heat resistance and Thermal Shrinkage Resistance	NFPA 2112 Sec. 8.4		%	No ignition, no dripping, no separation 10 % Shrinkage max.
Momentary electric arc (ATPV)*	ASTM F-1959		cal/cm <sup>2</sup>	8.7
Body Burn	ASTM F-1930		%	9.45

\* Equals Arc Thermal Performance Value. The higher the value, the better the insulation against second degree burn.

### CARE INSTRUCTIONS FOR FR FABRICS & GARMENTS

- Neutral soap should be applied for laundering process of FR fabrics.
- Chlorine bleach should not be used in the laundering process of FR fabrics, neither by itself nor with other components.
- Hydrogen peroxide should not be used on FR fabrics under any circumstance, either separate or as added to a detergent.
- For best results when washing and drying the FR garments should be turned inside out during wash and dry.
- The maximum temperature for washing FR garments is 50°C (122°F).
- When washing FR garments, normal washing cycle should be used.
- The maximum temperature for drying FR garments is 65°C (149°F).
- FR garments should be removed from dryer immediately after they are dry, or slightly moist. Over drying may cause shrinkage.
- Steam press or household ironing can be used on FR garments, as it is with cotton clothes.

### UL CERTIFICATION AS OUTER SHELL COMPONENT :

**NFPA 2112, Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire, 2012 Edition.**  
**ASTM F 1506, Standard Performance specification for Flame Resistant and Arc Rated Textile Materials for Wearing Apparel for Use by Electrical Workers Exposed to Momentary Electric Arc and Related Thermal Hazards, 2010a Edition.**  
**CAN/CGSB 155.20 Standard on Workwear for Protection Against Hydrocarbon Flash Fire, 2000 Edition.**