

DEFENDER®M

6.8 Twill



TRIED AND TRUE PERFORMANCE

INHERENT PROTECTION

This fabric's inherent FR properties offer the dependability and protection military professionals need.

MORE COMFORT

Lenzing® FR helps with moisture management to help keep the wearer more comfortable on the job.

MADE TO LAST

Defender®M delivers resistance to wear, tear, and fading for a long and useful life in the field.

DEFENDER[®]M

6.8 Twill

TECHNICAL DATA*	DEFENDER [®] M 6.8 TWILL
Nominal Weight	6.8 osy (220 gsm)
Construction	Woven
Color	Solids and Camouflage
Finish	Lenzing™ FR Rayon, Aramid, Nylon

Flame Resistance			
Manikin Burn ASTM F 1930	Predicted Body Burn	Pass	
Arc Thermal Performance Value (ATPV) NFPA 70E, ASTM 1959	ATPV Rating	6.5 cal/cm ²	
	PPE Category	Category 1	
Vertical Flame ASTM 6413	Initial and 25x after wash	After flame	< 2.0 sec
		After Glow	< 15.0 sec
		Char length	< 4.5 in (150 mm)
Thermal Shrinkage NFPA 2112	Initial	< 10 %	
Heat Transfer Performance NFPA 2112	Spaced	> 10.0	
	Contact	> 7.0	

Physical Testing		
Breaking Strength ASTM D5034 (warp & fill)	Initial	110 x 100 lbf (489 x 444 N)
Tearing Strength ASTM D1424 (warp & fill)	Dry	12 x 10 lbf (53 x 44 N)
	Wet	8 x 6 lbf (35 x 26 N)
Dimensional Stability AATCC 135	After 5 Cycles	< 5 %

Comfort	
Air Permeability ASTM D737	25 ft ³ /ft ² /min minimum

Appearance (Score 5 Best to 1 Worst)			
Colorfastness	Laundering 3A, 1x	Shade Change	minimum 2-3 *
	Xenon Light Exposure AATCC 16	After 40 hours	minimum 3 *
	Perspiration AATCC 15	Acid	minimum 3-4 *
		Alkaline	minimum 3-4 *
	Crocking AATCC 8	Dry	minimum 3.5 *
		Wet	minimum 2 *

* Appearance is dependent on shade of fabric.

Sunlight/UV Exposure Advisory: Prolonged sunlight and UV exposure can be damaging to aramid fibers. Both natural (undyed) and dyed aramid fibers will fade or change color with exposure to sunlight or other UV sources. The thermal performance is not affected, but long term or repeated exposures will cause the fabric to gradually weaken. Garments should be stored so that they are protected from sunlight, including windows and bay doors, to maximize wear life. TenCate Protective Fabrics offers no warranties, implied or otherwise, for color change or fabric damage due to UV exposure.



TenCate Protective Fabrics
is certified according:



All mentioned data must be considered as indicative values. To the best of our knowledge all information contained herein is accurate. TenCate Protective Fabrics declines any form of liability related to the use of the attached specimen that shall be regarded as a sample only and therefore not meant to be used in any form of garment making.