

DEFENDER[®] M

Twill



DESIGN TO ADAPT

Defender[®] M Twill
6.8 osy (230 gsm)

SELF-EXTINGUISHING

The FR properties will never wash out or wear away, no matter what.

LIGHTWEIGHT

Lenzing FR[®] provides incredible comfort by managing moisture all while keeping the wearer cooler when it's hot and drier when it's cool.

DURABILITY

Excellent resistance to wear, tear and fading provides a long and useful life.

DEFENDER[®]M

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TECHNICAL DATA		Defender [®] M Twill 6.8
Nominal Weight		6.8 osy (220 gsm)
Construction		Twill
Colors		Solids and Camouflage
Fiber Content		Lenzing [™] FR Rayon, Para-Aramid, Nylon
Flame Resistance		
Manikin Burn Predicted Body Burn (4 seconds exposure)	ASTM F 1930	35% maximum with head / 28% maximum without head
Arc Thermal Performance Value ATPV Rating PPE Category	NFPA 70E, ASTM 1959	6.5 cal/cm ² PPE Category 1
Vertical Flame Initial: After flame Initial: After glow Initial: Char length After 25, 50, and 100x Wash: After flame After 25, 50, and 100x Wash: After glow After 25, 50, and 100x Wash: Char length	ASTM 6413, MIL-PRF 32635 Type IV	< 2.0 sec < 15.0 sec < 4.5 in (150 mm) < 2.0 sec < 15.0 sec < 4.5 in (150 mm)
Thermal Shrinkage Initial	NFPA 2112 section 8.4, MIL-PRF 32635 Type IV	< 10%
Heat Transfer Performance Spaced Contact	NFPA 2112 section 8.4, MIL-PRF 32635 Type IV	10.0 minimum 7.0 minimum
PHYSICAL TESTING		
Breaking Strength Initial (warp x fill)	ASTM D5034, MIL-PRF 32635 Type III	489 x 444 N
Tearing Strength Dry (warp x fill) Wet (warp x fill)	ASTM D1424, MIL-PRF 32635 Type III	53 x 44 N 35 x 26 N
Dimensional Stability After 1 cycle After 5 cycles	AATCC 135 (3)(V) (Aiii), MIL-PRF 32635 Type III	< 3.5 % < 3.5 %
COMFORT & APPEARANCE		
Air Permeability	ASTM D737	25 ft ³ /ft ² /min
Color Fastness Laundering Shade Change Score 5 (Best) to 1 (Worst)	AATCC 61 3A	Minimum 3 *
Xenon Light Exposure After 40 AFU Score 5 (Best) to 1 (Worst)	AATCC 16	Minimum 3-4 *
Perspiration Acid Alkaline Score 5 (Best) to 1 (Worst)	AATCC 15	Minimum 3-4 * Minimum 3-4 *
Crocking Dry Wet Score 5 (Best) to 1 (Worst)	AATCC 15	Minimum 3.5 * Minimum 2 *

* Appearance is dependent on shade of fabric

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.