



**TENCATE**  
**Omniweave**<sup>TM</sup>  
 FEATURING 100% DuPONT<sup>TM</sup> NOMEX<sup>®</sup>

PROPERTIES	450	600	680	750
Nominal Weight	4.5 osy (155 gsm)	6.0 osy (205 gsm)	6.8 osy (230 gsm)	7.5 osy (255 gsm)
Fiber Blend	DuPont <sup>TM</sup> Nomex <sup>®</sup>	DuPont <sup>TM</sup> Nomex <sup>®</sup>	DuPont <sup>TM</sup> Nomex <sup>®</sup>	DuPont <sup>TM</sup> Nomex <sup>®</sup>
Colors Available	Royal Blue, Orange, Navy Blue, Yellow, Khaki, Natural, Gray & Black	Royal Blue, Orange, Navy Blue, Yellow, Red & Black	Dark Navy & Spruce	Navy Blue & Yellow
Made in America	Yes	Yes	Yes	Yes
THERMAL PROTECTION	450	600	680	750
Electric Arc Rating <small>ASTM 1959</small>	4.6 cal/cm <sup>2</sup> - 4.8 cal/cm <sup>2</sup>	5.7 cal/cm <sup>2</sup> - 5.9 cal/cm <sup>2</sup>	6.5 cal/cm <sup>2</sup> - 7.0 cal/cm	6.6 cal/cm <sup>2</sup> - 6.9 cal/cm <sup>2</sup>
Personal Protective Equipment (PPE) <small>NFPA 70E</small>	PPE 1	PPE 1	PPE 1	PPE 1
Thermal Protective Performance (TPP) With Spacer Without Spacer <small>NFPA 2112 Standard: With 6.0 Minimum, Without 3.0 Minimum</small>	10.5 cal/cm <sup>2</sup> 5.5 cal/cm <sup>2</sup>	12.0 cal/cm <sup>2</sup> 6.0 cal/cm <sup>2</sup>	14.0 cal/cm <sup>2</sup> 7.0 cal/cm <sup>2</sup>	14.0 cal/cm <sup>2</sup> 7.5 cal/cm <sup>2</sup>
Flame Resistance Char Length After Flame <small>ASTM 6413, NFPA 2112 Standard: 4.0 in Maximum, 2 sec Maximum</small>	< 4.0 in (< 10 cm) < 2 sec	< 4.0 in (< 10 cm) < 2 sec	< 4.0 in (< 10 cm) < 2 sec	< 4.0 in (< 10 cm) < 2 sec
Thermal Shrinkage (Before Laundering) <small>NFPA 2112 Standard: 10% Max</small>	3.0%	3.0%	3.0%	3.0%
FABRIC STRENGTH	450	600	680	750
Tensile Strength <small>ASTM D 5034</small>	170 lbf x 100 lbf 755 N x 455 N	240 lbf x 150 lbf 1,070 N x 670 N	260 lbf x 180 lbf 1,155 N x 800 N	250 lbf x 230 lbf 1,110 N x 1,025 N
Elmendorf Tear Strength <small>ASTM D 1424</small>	10 lbf x 7 lbf 45 N x 30 N	12 lbf x 8 lbf 55 N x 35 N	12 lbf x 8 lbf 55 N x 35 N	14 lbf x 12 lbf 60 N x 55 N
Dimensional Stability <small>AATCC 135</small>	≤ 3.0%	≤ 3.0%	≤ 3.0%	≤ 3.0%
COMFORT & LAUNDARING TESTS	450	600	680	750
Piling Resistance 30 minutes 60 minutes 90 minutes 120 minutes <small>ASTM 3512, Ratings: 5 Best, 3 Acceptable, 1 Poor</small>	4 5 5 5	4 5 5 5	4 5 5 5	3 4 5 5
Wicking 0.5 inch 1.0 inch 1.5 inches 2.0 inches	3.0 sec 13.0 sec 34.0 sec 62.0 sec	3.0 sec 10.0 sec 27.0 sec 58.0 sec	6.0 sec 14.0 sec 37.0 sec 79.0 sec	3.0 sec 12.0 sec 34.0 sec 70.0 sec
Washing Colorfastness 140°F (60° C) Industrial Wash, 160°F Max Stack Dry, 25x	4	4	4	4
Air Permeability	210 ft <sup>3</sup> /ft <sup>2</sup> /min	80 ft <sup>3</sup> /ft <sup>2</sup> /min	25 ft <sup>3</sup> /ft <sup>2</sup> /min	60 ft <sup>3</sup> /ft <sup>2</sup> /min
Colorfastness to Xenon Light (20 hours) <small>AATCC 16, Ratings: 5 Best, 3 Acceptable, 1 Poor</small>	3 - 4	3 - 4	3 - 4	3 - 4



6501 Mall Boulevard  
 Union City, Georgia 30291 USA  
 +1 (770) 969-1000  
 TenCateFabrics.com

TenCateFabrics.com/Facebook  
 TenCateFabrics.com/Twitter  
 TenCateFabrics.com/YouTube  
 TenCateFabrics.com/LinkedIn

All listed data represent typical values. Results from multiple tests unless otherwise stated. To the best of our knowledge, all information contained herein is accurate. TenCate Protective Fabrics USA assumes no liability whatsoever for the accuracy or completeness of the information contained herein. Users of any substance must satisfy themselves by independent investigation that the material can be used safely. TenCate Protective Fabrics describes only certain hazards but cannot guarantee these are the only hazards.

Copyright © 2014 TenCate Protective Fabrics USA. TenCate is a trademark of Royal Ten Cate. Omniweave is a registered trademark of TenCate Protective Fabrics USA.

Data-Sheet--Omniweave.pdf | Version 11072014A