



Tecasafe[®] Plus



TenCate Tecasafe[®] Plus Knit Fabric

PROPERTIES	670SP	671SP
Fabric Nominal Weight	6.7 osy (230 gsm)	6.7 osy (230 gsm)
Knit Type	Swiss Pique	Swiss Pique
Fiber Blend	Modacrylic, Cellulose & Aramid	Modacrylic, Cellulose & Aramid
Colors Available	Navy Blue	High-Vis Yellow, Orange, Red, Light Blue, Royal Blue, Gray & Khaki
Coolderm™ Technology	Yes	Yes
Made in America	Yes	Yes
THERMAL PROTECTION	670SP	671SP
Personal Protective Equipment (PPE) NFPA 70E	Category 2	Category 2
Electric Arc Rating ASTM 1959	8.2 cal/cm ²	8.3 cal/cm ²
Predicted Body Burn 3 seconds 4 seconds ASTM 1930	12% 33%	19% 33%
Thermal Protective Performance (TPP) With Spacer Without Spacer	11.0 cal/cm ² 7.0 cal/cm ²	11.0 cal/cm ² 8.5 cal/cm ²
Flame Resistance Before Laundering 100x After Wash ASTM 6413	< 4.0 in < 10,0 cm < 4.0 in < 10,0 cm	< 4.0 in < 10,0 cm < 4.0 in < 10,0 cm
Thermal Shrinkage Before Laundering	3.0% x 6.0%	2.0% x 4.5%
FABRIC STRENGTH	670SP	671SP
Ball Burst ASTM 3787	90 lbf (400 N)	100 lbf (445 N)
COMFORT	670SP	671SP
Air Permeability ASTM 3787	265 ft ³ /ft ² /min 135 cm ³ /cm ² /min	275 ft ³ /ft ² /min 140 cm ³ /cm ² /min
High-Visibility Color Standards Availability ANSI 107 Yellow CSA Z96-2009 Orange	- -	Yes Yes
SunSHIELD™ UV Protection	50+ UPF Blocks 96% UVB Min	50+ UPF Blocks 96% UVB Min

TenCate Tecasafe® Plus Woven Fabric

PROPERTIES	580	580A	700	700A	850A
Nominal Weight	5.8 osy 200 gsm	5.8 osy 200 gsm	7.0 osy 240 gsm	7.0 osy 240 gsm	8.5 osy 290 gsm
Woven Type	Twill	Twill	Twill	Twill	Twill
Fiber Blend	Modacrylic, Cellulose & Aramid	Modacrylic, Cellulose & Aramid	Modacrylic, Cellulose & Aramid	Modacrylic, Cellulose & Aramid	Modacrylic, Cellulose & Aramid
Colors Available	High-Vis Yellow, Yellow, Orange, Red, Light Blue, Royal Blue, Gray & Khaki	Navy Blue	High-Vis Yellow, Yellow, Orange, Red, Light Blue, Royal Blue, Gray & Khaki	Navy Blue	Navy Blue
Coolderm™ Technology	Yes	Yes	Yes	Yes	Yes
Made in America	Yes	Yes	Yes	Yes	Yes
THERMAL PROTECTION	580	580A	700	700A	850A
Hazard Risk Category NFPA 70E	Category 1	Category 1	Category 2	Category 2	Category 2
Electric Arc Rating ASTM 1959	6.5 cal/cm²	5.7 cal/cm²	9.0 cal/cm²	10.1 cal/cm²	10.2 cal/cm²
Predicted Body Burn 3 seconds 4 seconds ASTM 1930	22% -	29% -	13% 33%	23% -	19% -
Thermal Protective Performance (TPP) With Spacer Without Spacer NFPA 2112 Standard: With 6.0 Minimum, Without 3.0 Minimum	9.6 cal/cm² 6.6 cal/cm²	9.8 cal/cm² 6.5 cal/cm²	12.3 cal/cm² 10.9 cal/cm²	10.0 cal/cm² 7.5 cal/cm²	10.0 cal/cm² 8.6 cal/cm²
Flame Resistance Before Laundering After Flame ASTM 6413, NFPA 2112 Standard: 4.0 in Maximum, 2 sec Maximum	< 4.0 in < 10.0 cm < 2 sec	< 4.0 in < 10.0 cm < 2 sec	< 4.0 in < 10.0 cm < 2 sec	< 4.0 in < 1001 cm < 2 sec	< 4.0 in < 10.1 cm < 2 sec
Thermal Shrinkage (Before Laundering) NFPA 2112 Standard: 10% Max	< 4.0% x < 6.0%	< 5.0% x < 8.0%	≤ 3.0%	< 4.0%	< 3.0%
FABRIC STRENGTH	580	580A	700	700A	850A
Tensile Strength ASTM 5034	114 lbf x 85 lbf 507 N x 378 N	105 lbf x 80 lbf 467 N x 356 N	135 lbf x 85 lbf 600 N x 378 N	135 lbf x 85 lbf 600 N x 378 N	145 lbf x 90 lbf 645 N x 400 N
Elmendorf Tear Strength ASTM 1424	11 lbf x 10 lbf 49 N x 44 N	11 lbf x 10 lbf 49 N x 44 N	10 lbf x 8 lbf 44 N x 36 N	12 lbf x 10 lbf 53 N x 44 N	12 lbf x 10 lbf 53 N x 44 N
Dimensional Stability AATCC 135	≤ 3.0%	≤ 3.0%	≤ 3.0%	≤ 3.0%	≤ 3.0%
COMFORT & APPEARANCE	580	580A	700	700A	850A
Pilling Resistance ASTM 3512, Ratings: 5 Best, 3 Acceptable, 1 Poor	5	5	5	4 to 5	4 to 5
Wicking 0.5 inch 1.0 inch 1.5 inches 2.0 inches	3.5 sec 13.0 sec 29.0 sec 61.0 sec	3.5 sec 11.5 sec 28.0 sec 53.0 sec	3.5 sec 13.0 sec 29.0 sec 61.0 sec	3.5 sec 13.0 sec 29.0 sec 61.0 sec	3.5 sec 11.0 sec 29.0 sec 51.0 sec
High-Visibility Color Standards Availability ANSI 107-2010 Yellow CSA Z96-2009 Orange	Yes Yes	- -	Yes Yes	- -	- -
SunSHIELD™ UV Protection	50+ UPF Blocks 96% UVB Min	50+ UPF Blocks 96% UVB Min	50+ UPF Blocks 96% UVB Min	50+ UPF Blocks 96% UVB Min	50+ UPF Blocks 96% UVB Min



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. Tecasafe Plus and Coolderm Technology are registered trademarks of TenCate Protective Fabrics USA.

Data-Sheet--Tecasafe-Plus.pdf | Version 09112014B