

TENCATE

Tecasafe® plus

# UNBEATABLE ELECTRIC ARC and FLASH FIRE PROTECTION

TenCate Tecasafe® Plus delivers superior electric arc and flash fire protection in a comfortable lightweight fabric. It performs to the NFPA 70E and NFPA 2112 standards and lasts longer than FR treated fabrics, making Tecasafe® Plus a great value. Unlike other protective fabrics, it is inherently flame resistant. So, the unique FR protection comes built-in, and won't wash out or wear out.

TenCate high performance fabrics provide protection, comfort, durability and excellent value.

- **Inherently flame resistant** – FR properties are built in, and won't wash or wear out. Exceeds NFPA 70E HRC 1, HRC 2, and NFPA 2112 performance standards.
- **Comfortable to wear** – Soft and breathable. Superior moisture management because of special cellulosic fiber content.
- **Exceptional durability** – Outstanding abrasion resistance and better strength retention after multiple commercial washes.
- **Outstanding laundered appearance** – Fabric retains its like-new look and maintains permanent pressed appearance better than other protective fabrics.
- **Excellent value** – Long life cycle and competitive price means lowest cost.
- **High visibility** – ANSI 107 and CSA Z96 compliant for low visibility environments.



Light Blue



[www.tencateprotectivefabrics.com](http://www.tencateprotectivefabrics.com)







# Tecasafe® plus

## PHYSICAL PROPERTIES

		Tecasafe® Plus 580	Tecasafe® Plus 580-A	Tecasafe® Plus 700	Tecasafe® Plus 700-A	Tecasafe® Plus 850-A	NFPA 70E Requirement		NFPA 2112 Requirement
							HRC 1	HRC 2	
<b>FABRIC WEIGHT</b> (±5%)	oz /yd <sup>2</sup> g/m <sup>2</sup>	5.8 197	5.8 197	7.0 238	7.0 238	8.5 288			
<b>FIBER BLEND</b>		fr-modacrylic lyocell aramid	fr-modacrylic lyocell aramid	fr-modacrylic lyocell aramid	fr-modacrylic lyocell aramid	fr-modacrylic lyocell aramid			
<b>STANDARD COLORS</b> (other colors available upon request)		● ● ●	●	● ● ● ● ●	●	●			
<b>ARC THERMAL PERFORMANCE VALUE (ATPV)</b> (cal/cm <sup>2</sup> )	<b>ASTM F 1959</b>	6.5	5.7	9.0	10.1	10.2	5.0 min	8.0 min	
<b>FLAME RESISTANCE</b>	<b>ASTM D 6413</b>								
	Char Length (inches [warp x fill])	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	6.0 max	6.0 max	4.0 max
	After Flame (seconds [warp x fill])	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0			2.0 max
<b>THERMAL PROTECTIVE PERFORMANCE</b> (cal/cm <sup>2</sup> )									
	With spacer	9.6	9.8	12.3	10.0	10.0			6.0 min
	Without spacer	6.6	6.5	10.9	7.5	8.0			3.0 min
<b>FLASH FIRE EXPOSURE</b> (Manikin Test)	<b>ASTM F 1930</b>								
	(% body burn [2 cal/cm <sup>2</sup> /sec] @ 3 sec)	23	32	15	23.5	19			50.0 max
<b>TENSILE STRENGTH</b> (lbs [warp x fill])	<b>ASTM D 5034</b>	114 x 85	105 x 80	135 x 85	135 x 85	145 x 90			
<b>ELMENDORF TEAR STRENGTH</b> (lbs [warp x fill])	<b>ASTM D 1424</b>	11 x 10	11 x 10	10 x 8	12 x 10	12 x 10			
<b>DIMENSIONAL STABILITY</b> (% [5x]) 120°F	<b>AATCC 135</b>	≤ 3.0	≤ 3.0	≤ 3.0	≤ 3.0	≤ 3.0			
<b>WICKING</b>									
	1" strip, tap water (seconds)	0.5 inches	3.5	3.5	3.5	3.5			
		1.0 inches	13.0	11.5	13.0	13.0			
		1.5 inches	29.0	28.0	29.0	29.0			
		2.0 inches	61.0	53.0	61.0	51.0			
<b>PILLING RESISTANCE</b> (%)	<b>ASTM D 3512</b>								
	30–120 minutes	*5	*5	*5	*4–5	*4–5			
<b>THERMAL SHRINKAGE RESISTANCE</b>									
	(% [500°F, 5 minutes])	≤ 3.0	3.0	≤ 3.0	< 4.0	< 3.0			10.0 max

1. Tecasafe plus Orange meets Canadian high-visibility safety standard CSA Z96-2009.
2. Tecasafe plus Hi-Vis Yellow meets high-visibility safety standards ANSI 107 and CSA Z96-2009.

Ratings: \*5—Best, \*3—Acceptable, \*1—Poor

CONTACT US AT:

## TenCate Protective Fabrics

6501 Mall Blvd.  
P.O. Box 289  
Union City, GA 30291

PH: 1.800.241.8630  
FX: 1.770.969.6846  
tencateprotectivefabrics.com



Finishing and Non-woven are ISO-9001 Certified Facilities.

All listed test data and ranges represent typical values. All test data and ranges are the result of multiple tests unless otherwise stated. To the best of our knowledge, the information contained herein is accurate. However, TenCate Protective Fabrics 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. We have described certain hazards, but we cannot guarantee that these are the only hazards.

©2012 TenCate Protective Fabrics. TenCate is a trademark of Royal Ten Cate. Tecasafe is a registered trademark of TenCate Protective Fabrics.

3/2012 Tecasafe Plus 940.1247 with sample