

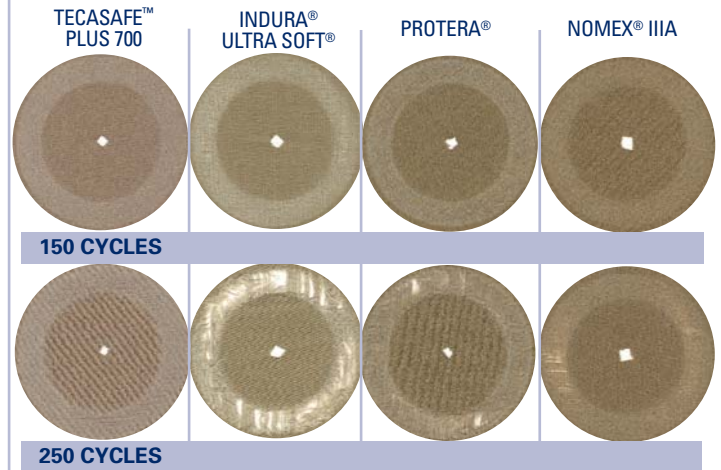
## YOUR BEST CHOICE FOR FLASH FIRE PROTECTION!

TENCATE™ TECASAFE™ PLUS provides comfortable, durable, and affordable flash fire protection to petroleum, petrochemical, fire service, and other professionals working in hazardous environments. Below you will see how TECASAFE™ PLUS inherently flame-resistant fabric provides superior protection and outperforms other protective fabrics.

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

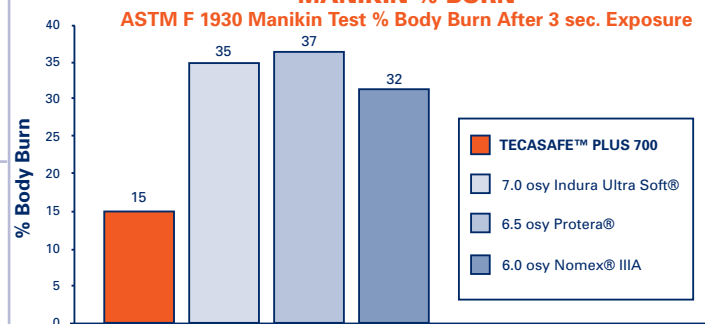
- **Protection**—NFPA 2112 compliant and NFPA 70E HRC 2 compliant. Low manikin % body burn of 15%. Inherently flame resistant, beyond the life of the garment. High resistance to thermal shrinkage.
- **Durability**—Superior abrasion resistance and higher strength against tears provides long service life at a cost-effective price. Retains outstanding strength (particularly at the seams) and excellent appearance after multiple industrial launderings.
- **Comfort**—Soft hand and breathable, better than conventional FR fabrics. Superior moisture management; special 37% cellulosic blend fiber wicks 3 times better than cotton.

### TABER ABRASION TEST RESULTS



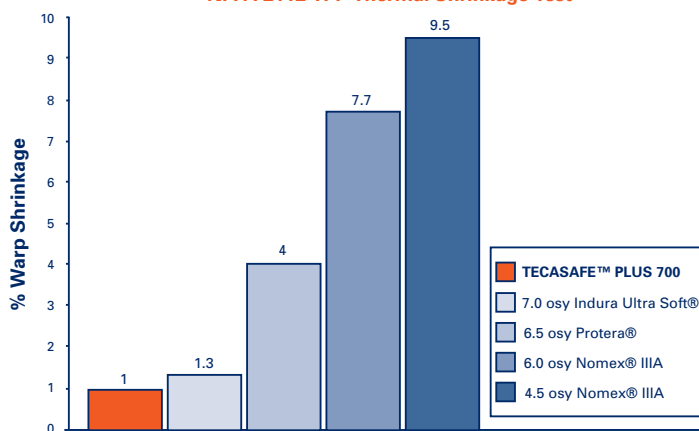
### MANIKIN % BURN

ASTM F 1930 Manikin Test % Body Burn After 3 sec. Exposure



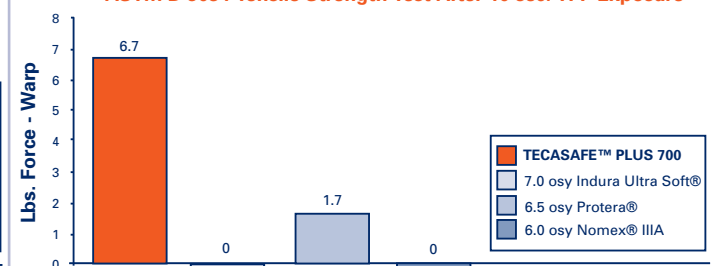
### RESISTANCE TO THERMAL SHRINKAGE

NFPA 2112 TPP Thermal Shrinkage Test



### STRENGTH AFTER THERMAL EXPOSURE

ASTM D 5034 Tensile Strength Test After 10 sec. TPP Exposure



Fiber content: 48% ppan-fr/37% cellulosic/15% para-aramid

● Khaki ● Light Blue ● Orange ● Gray ● Red ● Navy ● Royal Blue

PHYSICAL PROPERTIES	TECASAFE™ PLUS 700	NFPA 70E HRC 2 REQUIREMENT	NFPA 2112 REQUIREMENT
<b>Weight (+ or - 5%)</b> oz (sq yd) grams (sq meter)	7.0 238		
<b>Arc Thermal Performance Value (ATPV) (cal/cm²)</b> ASTM F 1959	8.4	8.0	
<b>Vertical Flammability</b> Char Length (inches [warp x fill]) ASTM D 6413 After Flame (seconds [warp x fill])	<4.0 x <4.0 0.0 x 0.0	6.0 maximum	4.0 maximum 2.0 maximum
<b>Thermal Protective Performance (cal/cm²)</b> with spacer without spacer	12.3 10.9		6.0 minimum 3.0 minimum
<b>Flash Fire Exposure (Manikin Test)</b> ASTM F 1930 (% body burn [2 cal/cm²/sec] @ 3 sec)	15		50 maximum
<b>Tensile Strength (lbs [warp x fill])</b> ASTM D 5034	135 x 85		
<b>Elmendorf Tear Strength (lbs [warp x fill])</b> ASTM D 1424	8.0 x 7.0		
<b>Dimensional Stability</b> AATCC 135 (% [5x]) 120°F	<3.0		
<b>Colorfastness to Washing</b> AATCC 61-21	*4-5		
<b>Colorfastness to Xenon Light (20 hours)</b> AATCC 16	*3-4		
<b>Colorfastness to Crocking</b> AATCC 8	Wet Dry *3-4 *5		
<b>Wicking</b> 1" strip, tap water (seconds)	0.5 inches 1.0 inches 1.5 inches 2.0 inches	3.5 13 29 61	
<b>Pilling Resistance</b> ASTM D 3512	30 – 120 minutes	*5	
<b>Heat Resistance</b> (500°F, 5 minutes)	pass		shall not melt, drip separate or ignite
<b>Thermal Shrinkage Resistance</b> (% [500°F, 5 minutes])	<1.0		10.0 maximum

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



**LAUNDERING:** Garments made with TECASAFE™ PLUS fabrics are easily maintained by home or industrial laundering. For detailed laundering specifications, please contact TENCATE at (800) 241-8630.

**SUNLIGHT/UV EXPOSURE ADVISORY:** Like other natural and synthetic textile materials, Tecasafe plus may be impacted by prolonged exposure to ultra violet radiation (UV) from both sunlight and artificial light sources. Dyed fabrics may change color or fade after prolonged exposures, but UV exposure does not impact flame resistant properties. Similar to other natural and synthetic textile materials, color change or fading is not necessarily indicative of fiber degradation. Extended exposure to UV radiation can also cause loss of mechanical properties depending on wave length, exposure time and radiation intensity. Our tests indicate that Tecasafe plus maintains higher tensile strength after extended UV exposure than equivalent weights of 100% aramid and 88/12 FR cotton/ nylon blend fabrics. TENCATE/ SOUTHERN MILLS, INC. OFFERS NO WARRANTIES, IMPLIED OR OTHERWISE, FOR COLOR CHANGE OR FABRIC DAMAGE DUE TO UV EXPOSURE.

To the best of our knowledge, the information contained herein is accurate. However, SOUTHERN MILLS, Inc. 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.

©2009 SOUTHERN MILLS, Inc. TENCATE is a trademark of ROYAL TEN CATE NV. TECASAFE is a trademark of TenCate Protect bv. Indura and Ultra Soft are registered trademarks of Wvestex. Nomex and Protera are registered trademarks of DuPont. SOUTHERN MILLS, Inc. patents pending.

12/30/08 162-09-004 940.1255 without sample/940.9128 with sample

materials that make a difference

**TenCate Protective Fabrics**

SOUTHERN MILLS, Inc.

6501 Mall Blvd.

P.O. Box 289

Union City, GA 30291

Phone: 770.969.1000

Fax: 770.969.6846

Toll Free: 800.241.8630

[www.tencate.com/protective](http://www.tencate.com/protective)