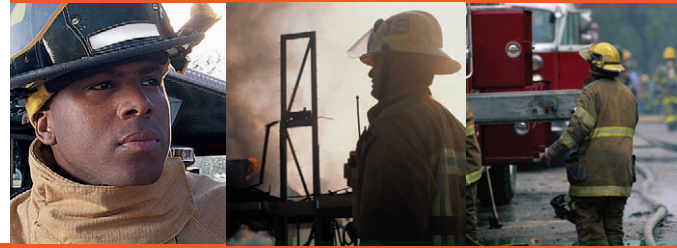




Advance ultra[®]



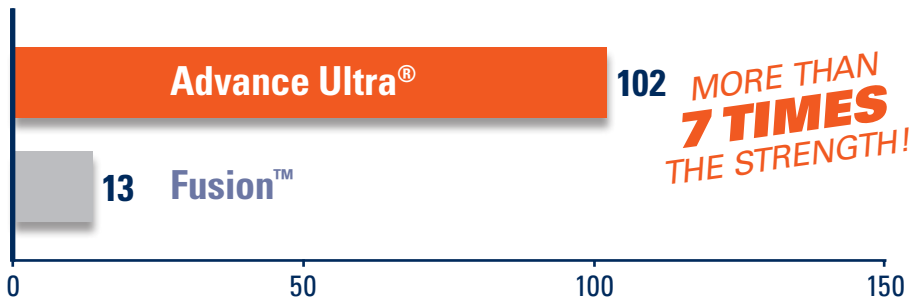
More than 7 times the strength of Fusion[™]. Protection plus durability means real value.

Engineered with an innovative triple fiber blend, TenCate Advance Ultra[®] offers an exceptional combination of strength, durability, and thermal protection. The stronger the outer shell is after thermal exposure, the more protection it provides because breakopen is less likely to occur.

To test the strength of outer shell fabrics, manufacturers expose the fabric to a heat source, then measure the Breaking Force/Tensile Strength after thermal exposure.

TENSILE STRENGTH AFTER TPP EXPOSURE

Outer Shell Fabrics After a 17.5 Second TPP Exposure



Advance Ultra versus Fusion[™]

Shown above are the tensile strength values of Advance Ultra[®] vs. Fusion[™] after a 17.5 second TPP exposure (2 cal/cm²). As you can see, Advance Ultra has more than 30 times the tensile strength of Fusion, showing superior thermal protection.

Taber Abrasion tests also prove that Advance Ultra is significantly more durable, meaning longer wear life and greater value.

Light Gold

FIBER BLEND: 60% Kevlar[®]
20% Nomex[®]
20% PBO

WEIGHT: 7.5 oz (sq yd)

WEAVE: Rip-Stop

COLOR: Light Gold, Yellow,
Dark Gold

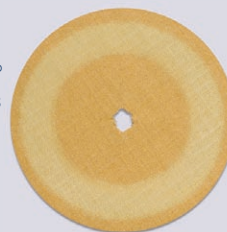
FINISH: Super Shelltite[™]

END USE: Turnout Gear Outer Shells

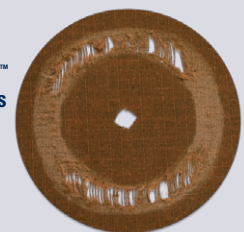
TABER ABRASION PERFORMANCE After Taber Abrasion Test

**5 TIMES
THE RESISTANCE!**

Advance Ultra[®]
4,000 cycles



Fusion[™]
750 cycles



THERMAL PROTECTIVE PERFORMANCE

Outer Shells with Caldura® and PTFE Moisture Barrier



TENSILE STRENGTH AFTER 10 LAUNDERINGS

Tensile Strength of Weakest Fabric Direction After 10 Standardized Laundering



TENSILE STRENGTH AFTER ACCELERATED LIGHT EXPOSURE

Tensile Strength of Weakest Fabric Direction After 80 Hours Xenon Exposure



TEAR STRENGTH AFTER TPP EXPOSURE

Outer Shell Fabrics After a 17.5 Second TPP Exposure



PHYSICAL PROPERTIES		TenCate Advance Ultra®	NFPA 1971 Requirements
Trapezoidal Tear Strength (lbs) Initial (warp x fill) After 5 launderings (warp x fill)	ASTM D 5587*	45 x 45 40 x 35	22.0 min
Tensile Strength (lbs) Initial (warp x fill) After 10 launderings (warp x fill)	ASTM D 5034	440 x 420 320 x 310	140.0 min
Tensile Strength (lbs) after 17.5-second TPP Exposure (2.0 cal/cm ² • sec) (warp x fill)		110 x 100	
Water Absorption Resistance (%) Initial After 5 launderings	AATCC 42	< 1.0 < 2.5	30.0 max
Flame Resistance Char Length in inches (warp x fill) (Initial) Char Length in inches (warp x fill) (After 5 launderings) After Flame in seconds (warp x fill)	ASTM D 6413	0.1 x 0.1 0.1 x 0.1 0.0 x 0.0	4.0 max 2.0 max
Laundry Shrinkage (%) After 5 launderings (cotton sturdy cycle) (warp x fill)	AATCC 135	< 5.0 x < 5.0	5.0 max
Heat and Thermal Shrinkage (%) 500°F for 5 minutes After 5 launderings	NFPA 1971	< 1.0 < 1.0	10.0 max

*NFPA 1971-2007 specifies Trapezoidal Tear Strength measurement according to ASTM D 5587 not allowing for specimen slippage.

Exceptional thermal protection – Strong and flexible before and after thermal exposure.

Superior abrasion resistance – Resists abrasion, holes and tears.

Outstanding value – Offers reliable, long lasting, and durable protection at an affordable price.

TenCate Advance Ultra® delivers peace of mind when lives are on the line.