

TENCATE Tecashield

EMERGENCY RESPONSE

The TenCate Tecashield® collection is a range of inherently heat- and flame-resistant fabrics.

CX 140 – 140 g/m²

Inherently heat- and flame-resistant fabric

Thermal moisture barrier:

Thermal barrier: 3-D spunlace non-woven - meta-aramid/para-aramid

Membrane: ePTFE/PU BI-component

The TenCate Tecashield® - CX 140 takes thermal moisture barrier technology to an entirely new level. This fabric is a thermal barrier with a membrane. The thermal barrier is engineered with a patented 3-D spunlace non-woven technology which provides better insulation and moisture management. The ePTFE/PU bi-component laminate provides superior breathability and is high-temperature resistant and durable due to PU-layer.

The best solution – Suitable for application as the thermal moisture barrier in firefighters turnout gear – Complies with EN 469: 2005.

Outstanding comfort – The most flexible thermal moisture barrier on the market, thin and ultra-light (140 g/m²).

Excellent thermal performance – Gives better thermal protection than comparable thermal moisture barriers in the same weight class, due to 3-D imaged spunlace non-woven.





Liquid chemicals and water protection – Excellent protection against water and hazardous liquids – complies with EN 343, class 3/3: 2003.

Highly durable – The fabric has been thoroughly tested for its protective properties and has also been submitted to an extensive range of washing and wearing tests at independent testing institutes.

Complete system – TenCate is able to supply all the components of the firefighters turn out gear: outer shell, moisture barrier, thermal barrier, thermal liner, reinforcement and cuffs.



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Technical data	TenCate Tecashield®	Test method	Fabric in stock
Quality	CX 140		TenCate Tecashield® - CX 140 is available with a minimum order length of 100 metres.
Width	150 cm (+2/-1 cm)	ISO 3801: 1978	
Weight	140 g/m ² (± 5%)	ISO 3932: 1980	Please contact TenCate for further advice on laundering and our recommended tape.
Composition	Thermal barrier: 3-D spunlace non-woven - meta-aramid/para-aramid Membrane: ePTFE/PU BI-component		
Protection	Thermal moisture barrier for firefighters turnout gear		
PPE* requirements			
Domestic laundering			
Recommended tape	TenCate Tecashield® - TP 3 The quality level of CX 140 is only guaranteed by using this tape for the sealing of the garment.		
Certification			
	Water penetration and water vapour resistance	EN 343, class 3: 2003	* Copyright symbols: NEN, Delft (Netherlands) ** After pre-treatment (five wash/dry cycles according to EN ISO 6330: 2000. Procedure 2A (60°C) with tumble drying (Procedure E) (max. 50 °C outlet temperature). *** As received **** Tested in a 3-layer system of TenCate.
	Firefighting	EN 469: 2005	
	Protection against blood and blood borne pathogens	EN 14126: 2003 level 6, test methods ISO 16603 and ISO 16604	

Summary of results EN 469: 2005				
Property	Test method	EN 469: 2005 requirements	Results obtained	PASS/level
6.1 Flame spread (non-woven side)	EN ISO 15025: 2002 Procedure A	EN 533 index 3 No flaming to edge - No hole formation - No flaming or molton debris - Mean afterflame ≤ 2s - Afterglow not to spread	EN 533 index 3 No flaming to edge - No hole formation - No flaming or molton debris - No afterflame - No afterglow	PASS**
6.2 Heat transfer (flame)	EN 367: 1992	Level 1 HTI ₂₄ ≥ 9.0 HTI ₂₄ - HTI ₁₂ ≥ 3.0	Level 2 HTI ₂₄ ≥ 13.0 HTI ₂₄ - HTI ₁₂ ≥ 4.0	Level 2** and ****
6.3 Heat transfer (radiation)	EN ISO 6942: 2002 Method B at 40kW/m ²	Level 1 RHTI ₂₄ ≥ 10.0 RHTI ₂₄ - RHTI ₁₂ ≥ 3.0	Level 2 RHTI ₂₄ ≥ 18.0 RHTI ₂₄ - RHTI ₁₂ ≥ 4.0	Level 2** and ****
6.5 Heat resistance	ISO 17493: 2000 at 180 °C	Materials shall not ignite or melt Shrinkage ≤ 5%	Material did not ignite or melt. Max. Shrinkage: 0.5%	PASS***
6.10 Resistance to penetration by liquid chemicals	EN ISO 6530: 2005 1. 40% NaOH 2. 36% HCl 3. 30% H ₂ SO ₄ 4. 100% δ-xylene	No penetration to innermost surface. Repellency rate > 80%	Pen. Repellency 1. Nil 98.6% 2. Nil 95.8% 3. Nil 95.0% 4. Nil 86.9%	PASS** and ****
6.11 Resistance to water penetration	EN 20811: 1992 (1996)	Level 1 < 20kPa	Level 2 ≥ 20kPa	Level 2**
6.12 Water vapour resistance	EN 31092: 1993	Level 1 > 30m ² .Pa/W	Level 2 ≤ 30m ² .Pa/W	Level 2** and ****



Member of the E.T.S.A.

TenCate Protective Fabrics

TenCate Protective Fabrics consists of three companies: TenCate Protective Fabrics EMEA, TenCate Protective Fabrics Americas and TenCate Protective Fabrics Asia. We develop and produce the most comprehensive range of proven, high-performance fabrics used to make protective clothing.

Our fabrics become lifesaving garments for firefighters, industrial workers, military personnel and other professionals working under hazardous conditions in danger zones around the world.

We work closely with our customers, end-users, fibre and chemical manufacturers and independent laboratories. As a result, TenCate Protective Fabrics is the one source the world looks to for leadership in knowledge of materials, consistent product quality, and a proven commitment to service excellence.

TenCate is a trademark of Royal Ten Cate nv. Tecashield is a trademark of Ten Cate Protect bv. Ten Cate Protect bv is a subsidiary of Royal Ten Cate nv.

Q1-2013 Please check our website for the latest product information.



materials that make a difference

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