



# Defender™ M

MILITARY & POLICE

The TenCate Defender™ M collection is a range of inherently heat- and flame-resistant fabrics.

DM 9180 – 180 g/m<sup>2</sup>

## Proven to be the best inherent FR fabric for operational uniforms

For many years, TenCate has been known for its patented top-level fabric, TenCate Defender™ M. This proven fabric has been supplied to millions of soldiers and police officers worldwide, protecting them in conflict zones. The unique inherent heat- and flame-resistant properties of TenCate Defender™ M help to protect against severe burn injuries from IEDs, blasts and fuel. The fabric has been engineered with Lenzing FR® fibres, making it the most comfortable combat fabric in terms of breathability, moisture absorption and evaporation. This makes TenCate Defender™ M the best defence and tactical fabric around – one that simply cannot be ignored.

**Superior thermal protection** – Protects against heat and flame (complies with EN ISO 11612 A1, A2, B1, C1: 2008).

**Highly comfortable** – Ultra light, extremely breathable and excellent moisture absorption.

**Unbeatable durability** – Excellent resistance to wear, tear and fading are combined to provide a long useful garment life. The flame-resistant properties are built in and cannot be washed out.

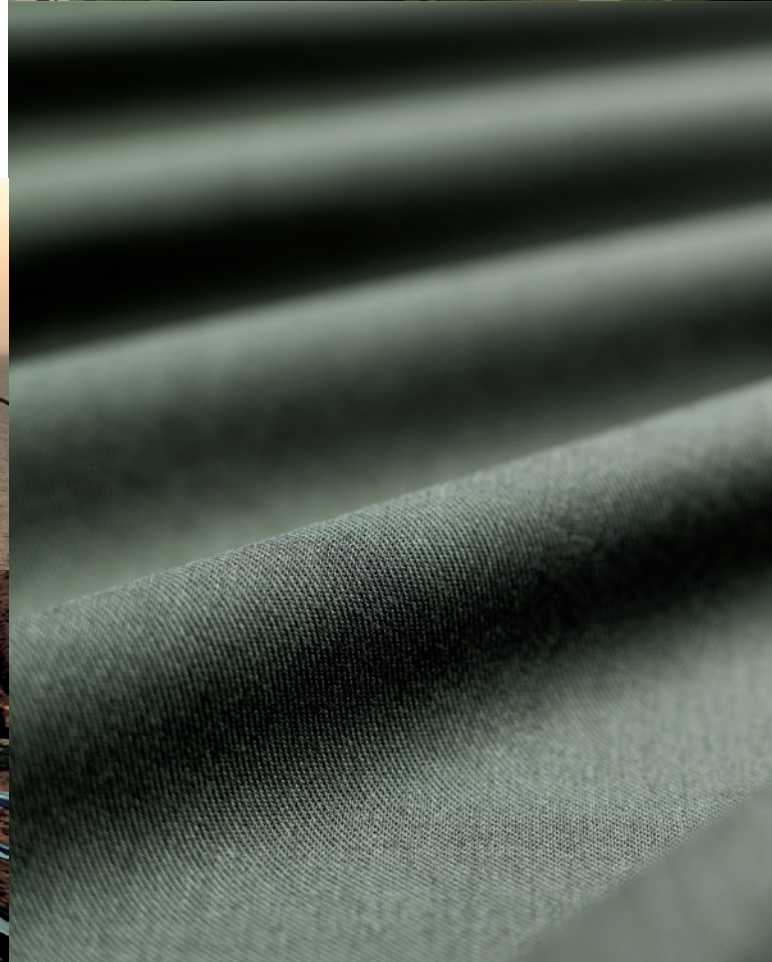
**Long-lasting looks** – The fabric has been thoroughly tested for its protective properties and has been submitted to an extensive range of washing and durability tests at independent testing institutes.

**Outstanding value** – Suitable for application in protective clothing for naval forces, ground forces, air forces, special forces and law enforcement.

**Uni-colours** – Available in Olive green and Tan.

**Optional: Limited chemical protection** – Protects against splashes, thanks to Hydro-Tec, an innovative nanotechnology finish (complies with EN 13034, type 6: 2005).

**Optional: Foul-weather protection** – Thanks to a special Hydro-Control™ membrane (PTFE/PU) is waterproof, extremely breathable and offers good protection against wind (complies with EN 343 3/3:2003).



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Technical data	TenCate Defender™ M	Test method
Quality	DM 9180	
Width	163 cm (+2/-1 cm)	ISO 22198: 2006
Weight	180 g/m <sup>2</sup> (±5%)	ISO 3801: 1977
Composition	Lenzing FR®/para-aramid/polyamid/anti-static	
Construction	2/1 Twill	
Available finishes	Hydro-Tec	
Tensile strength	750 N x 650 N (±10%)	ISO 13934-1: 1999
Tear strength	45 N x 40 N (±10%)	ISO 13937-1: 2000
Abrasion resistance on Martindale	50,000 @ 12 kPa	ISO 12947-2: 2002
Dimensional stability	± 3%	ISO 5077: 2007
Air permeability	> 300 L/m <sup>2</sup> /s @ 100 Pa	ISO 9237: 1995
Flame resistance	meets ISO 14116: 2008 Index 3	ISO 15025: 2000
Heat resistance 180°C	± 5% shrinkage. Does not melt or self ignite.	ISO 17493: 2000
Washing symbols		
PPE requirements*		
<b>Certification</b>		
	Industrial flame & heat hazards	EN ISO 11612 A1, A2, B1, C1: 2008
	Liquid chemicals**	EN 13034, type 6: 2005
	Anti-static for explosion risk	EN 1149-5: 2008, EN 1149-3: 2004
	General requirements***	EN 340: 2003

**Camouflage**

TenCate is one of the few companies worldwide capable of providing any printed camouflage pattern according to defence ministry specifications.

**Optional Uni-colours**

E.g. Olive green, Tan and Coyote Brown.

\* Copyright symbols: NEN, Delft (Netherlands)  
 \*\* Hydro-Tec finish only  
 \*\*\* Tested on specific colours



Member of the E.T.S.A.



**TenCate Protective Fabrics**

TenCate is the world's No. 1 producer of protective fabrics for the manufacturing of safety wear. We supply garment-makers with an extensive range of top-quality and technologically advanced fabrics.

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

Q1-2016 Please check our website for the latest product information.



TEN CATE PROTECT BV  
 TenCate Protective Fabrics  
 P.O. Box 186  
 7440 AD Nijverdal  
 The Netherlands  
 Tel. +31 (0)548 633922  
 Fax +31 (0)548 633256  
 E-mail protectivefabrics@tencate.com

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