

TOP FLAME - high socks			
Description	Sock made with PROTAL1® fibre, inherently fire resistant; the textile assures total protection of the foot against the thermal risks caused by accidental contact with flame and/or exposure to source of convective and radiant heat, the antistatic yarn, equally spread along the whole sock, guarantees a valid dissipation of the electrostatic charges, the knitted fabric is tested to comply with EN 11612 A1 B1 C1:2008 and EN1149-5:2008 standards, protection against electrostatic charges, breathable, antibacterial fabric, reinforced tip and heel . Recommendable in ATEX environments. MINIMUM ORDER: 3 pairs per size, single packaging		
Maintenance	Maximum wash temperature: 40°C - Do not bleach – Dry cleaning allowed – Do not dry in a tumble dryer – Medium iron temperature: 110°C     	Item	CL-003-00 navy
		Standards	 A1 B1 C1  UNI EN 340:2004
		Sizes	• XS (36-38) • S (39-41) • M (42-44) • L (45-47) • XL (48-50)

SAFETY TECHNICAL SPECIFICATION					
	Test method	description	Cofra result		Minimum requirement / range
Background fabric	EN ISO 1833-1977, SECTION 10	Composition :	60% modacrylic 38% cotton 2% carbon fibre		
	UNI EN 340:2004 4.2 (EN 1413)	pH value	pH = 6,0		3,5 ≤ pH ≤ 9,5
	UNI EN 340:2004 4.2(prEN 14362-1)	Search of the aromatic and carcinogenic amines	Not recording		≤30 ppm
	UNI EN 340:2004 (ISO 105-E04:2008)	Colour fastness to perspiration	Acidic	Alkaline	
		Colour change	4-5	4-5	1-5
		acetate	4-5	4-5	1-5
		cotton	3-4	3-4	1-5
		nylon	4-5	4-5	1-5
		polyester	4-5	4-5	1-5
		acrylic	4-5	4-5	1-5
		woll	4-5	4-5	1-5

UNI EN ISO 11612:2009 6.2 (ISO 17493:2000)	Heat resistance 180°C	Performance level according to EN ISO 11612:2008 valid Max shrink in length : -3.4% in width : -1.6%	Any layer can ignite Any layer can melt Any layer shrink more than 5%.
UNI EN ISO 11612:2009 6.3.2 (UNI EN ISO 15025: 2000 Method A)	Equipment for determination of limited flame spread- after Pre-Treatment	LEVEL ACCORDING EN ISO 11612:2008 A1 PASS	No Flaming to top or either side edge No Hole formation
UNI EN ISO 11612:2009 6.3.2 (UNI EN ISO 15025: 2000 Method A)	Equipment for determination of limited flame spread – as received	LEVEL ACCORDING EN ISO 11612:2008 A1 PASS	No Melting Afterglow time ≤2 s After flame time ≤2 s
UNI EN ISO 11612:2009 6.5.3 (UNI EN ISO 13938-1:2001)	Burst strength	Specimen KPa 1 845 2 837 3 836 4 845 5 837 Average value 840 Coefficient of variation 0,5%	>200 KPa
UNI EN ISO 11612:2009 7.2(ISO 9151:1995)	Convective heat (code letter B)	Specimen HTI12 1 5.5 s 2 5.2 s 3 5.6 s Specimen HTI24 1 7.6 s 2 7.4 s 3 7.8 s LEVEL B1	Level HTI24 B1 ≥ 4.0s B2 ≥ 10.0s B3 ≥ 20.0s
UNI EN ISO 11612:2009 7.3 (UNI EN ISO 6942: 2004 Method B 20kW/m²)	Radiant heat (code letter C)	Specimen RHTI12 1 8.8 s 2 8.8 s 3 9.3 s Average value 9 s Specimen RHTI24 1 15.8 s 2 16.0 s 3 16.8 s Average value 16.2 s LEVEL C1	Level RHTI24 C1 ≥ 7.0s C2 ≥ 20.0s C3 ≥ 50.0s C4 ≥ 95.0s
		Heat flux density transmitted Q _c Specimen kW/m² 1 9.4 2 9.2 3 8.7 Average value 9.1	

	UNI EN ISO 1149-5:2008 Induction decay Paragraph 4.2.1 (UNI EN 1149-3 method 2)	Factor of heat transmission TF (Q ₀)	
		Specimen	%
		1	46.8
		2	45.6
		3	43.2
		Average value 45.2	
		Shielding factor S	
		Specimen	value
		1	0.25
		2	0.28
		3	0.26
		Average value 0.26	
		Half decay time T ₅₀	
		T ₅₀ < 4s	
		Specimen	s
		1	2.98
		2	1.62
		3	1.75
		Average value 2.12	