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your delivery of	**your reference**	**our reference**	**date**
2009-07-14		PVH/7596	Zwijnaarde, 2009-08-27

Analysis Report 69847/D

Required tests :

Determination of the whole glove integrity
Determination of the gloved finger dexterity
Determination of the time for the removal of gloves
Determination of the total length and the circumference of gloves
Determination of the pH of an aqueous extract
Protective gloves for firefighters
Burning behaviour

Identification number	Information given by the client	Date of receipt
T907299	NORDIC ELK GRIP GLOVES (PRO49)	2009-07-14

Pros Van Hoeyland
order responsible

Reference : T907299 - NORDIC ELK GRIP GLOVES (PRO49)

Determination of the whole glove integrity

1. Method:

Applied standard : EN 511 5.3 (year: 2006)
ISO 15383 6.4.3 annex A (year: 2001)

Deviations of the standard : -

Pretreatment : according ISO 15383 5.4.1 was not carried out

Number of specimens : 3 pair of gloves

2. Results:

Date of ending the test: 24-07-2009

specimen (size 7)	does the glove do fulfil the requirements of the test?
1. left hand	Yes
2. right hand	Yes
3. left hand	Yes
4. right hand	Yes
5. left hand	Yes
6. right hand	Yes

Performed in the physical lab under the responsibility of Willy Vande Wiele.

Reference : T907299 - NORDIC ELK GRIP GLOVES (PRO49)

Determination of the gloved finger dexterity

1. Method:

Applied standard : EN 420 part 6.2 (year: 2003)
The used pins have a length of 40 mm and a diameter of respectively 5 mm, 6,5 mm, 8 mm, 9,5 mm and 11 mm.
Deviations of the standard : -
Number of specimens : 4 gloves

2. Results:

Date of ending the test: 24-07-2009

size of the glove	right hand	left hand
7	∅ 9,5	∅ 9,5
7	∅ 9,5	∅ 9,5
smallest pin	∅ 9,5 mm	∅ 9,5 mm

Result: the diameter of the smallest pin that could be taken: 9,5 mm

Reference : T907299 - NORDIC ELK GRIP GLOVES (PRO49)

Determination of the time for the removal of gloves

1. Method:

Applied method : EN 659 (year: 2003)
Deviations of the standard : -
Number of specimens : 3 pairs of gloves
Conditioning : - dry at 20°C and 65% rel. humidity
- wet conditioning at 20°C for 2 min.
(gloves first filled with water prior to immersion)
Draining time : 5 min.
Conditioning time : 5 min.
Number of operators : 1

2. Results:

Date of ending the test: 24-07-2009

time for the removal of one pair of gloves			
glove size	pair	dry	wet
7	1	1,5	1,7
7	2	1,8	2,2
7	3	1,9	2,3
	mean value	1,7 s	2,1 s
	final result	2 s	2 s

Performed in the physical lab under the responsibility of Willy Vande Wiele.

Reference : T907299 - NORDIC ELK GRIP GLOVES (PRO49)

Determination of the total length and the circumference of gloves

1. Method:

Applied standard : EN 420 §6.1 (year: 2003)
Deviations of the standard : the circumference is measured on the outside of the glove
Number of specimens : 5 x 2

2. Results:

Date of ending the test: 18-08-2009

Specimen		Size*	Total length (mm)	Length to the wrist (mm)	Circumference (mm)
1	L	7	274	193	266
	R	7	276	196	267
2	L	8	278	198	277
	R	8	279	193	275
3	L	9	292	200	286
	R	9	293	203	278
4	L	10	301	213	296
	R	10	305	215	295
5	L	11	315	227	313
	R	11	319	232	310

Remark: * size on the gloves

Performed in the physical lab under the responsibility of Willy Vande Wiele.

Reference : T907299 - NORDIC ELK GRIP GLOVES (PRO49)

Determination of the pH of an aqueous extract

1. Method

Standard used : ISO 4045 (1977)

Deviation from the standard : -

Electrode used : combined glass-electrode

2. Results

Date of ending the test : 2009-08-05

pH of the extraction liquid : 6.90

Temperature of the extract : 31°C

pH	3.90

Performed under accreditation in the chemical lab under the responsibility of Eddy Albrecht.

Reference : T907299 - NORDIC ELK GRIP GLOVES (PRO49)

Protective gloves for firefighters
Burning behaviour

1. Method:

Test Method - EN 407 § 6.3 (2004)
Standard - EN 659 + A1 (2008)
Deviations from the standard - /

2. Results:

End of tests: 22 July 2009

seam 1

	3s	**15s**
afterflame time (s)	0	0
afterglow time (s)	0	0
dripping	no	no
seam destroyed	no	no
melting of innermost layer	no	no

seam 2

	3s	**15s**
afterflame time (s)	0	0
afterglow time (s)	0	0
dripping	no	no
seam destroyed	no	no
melting of innermost layer	no	no

Requirements in accordance with EN 659 + A1 (2008) § 3.7

- afterflame time ≤ 2s
- afterglow time ≤ 5 s
- no dripping
- seams shall not be destroyed (test 15 s)
- no melting of the innermost layer (visual inspection)

Performed under accreditation in the fire lab under the responsibility of Pros Van Hoeyland.