

1° Istituto Italiano di ricerca, collaudo, test e certificazione di calzature, abbigliamento
dispositivi di protezione individuale per il lavoro, lo sport, e l'outdoor

The 1st Italian testing and research center for footwear, clothing,
Personal Protective Equipment and Outdoor Sports Equipment

1. Italienisches Prüf- und Forschungsinstitut für Schuhe, Bekleidung,
Persönliche Schutzausrüstung und Outdoor Sportausrüstung

LR

Firm: **GRISPORT SPA**
Via Erega, 1
31030 Castelcuoco (TV)
Italia

DC8397/E

For the attention of: Mara Forner

TEST REPORT

RAPPORTO DI PROVA

PRÜFBERICHT

N. **361315/E**

date: 12/04/2017

Sampling: done by the Applicant

Samples received on: *

Test period: *

ORGANISMO NOTIFICATO N. 0498
Tutti i risultati si riferiscono esclusivamente
ai materiali esaminati.
Vietata la riproduzione parziale o la
pubblicazione, ad es. a scopo
pubblicitario, senza autorizzazione scritta di
RCT.
L'esito positivo di un rapporto di prova non
implica che il prodotto sia "approvato" o
"certificato" da RCT.
Commenti e dichiarazioni sono di natura
sogettiva e non fanno parte del RdP.
Prova eseguita da laboratorio partner
qualificato.

NOTIFIED BODY N. 0498
All results refer exclusively to the tested
materials.
Partial reproduction or publication, e.g. for
advertising purpose not admitted without
written authorization by RCT.
Positive results of a test report do not imply
that the tested product is "certified" or
"approved" by RCT.
Comments and interpretations are of
subjective nature and not part of the Test
Report.
Test carried out by qualified partner lab.

NOTIFIZIERTE STELLE N. 0498
Alle Ergebnisse beziehen sich nur auf die
geprüften Materialien.
Partielle Reproduktion oder
Veröffentlichung, z.B. zu Reklamezwecken,
ist nicht gestattet ohne schriftliche
Zustimmung von RCT.
Positive Ergebnisse eines Prüfberichtes
bedeuten keine Homologierung oder
Zertifizierung des Produkts durch RCT.
Kommentare und Erklärungen sind
subjektiver Natur und nicht Teil des
Prüfbericht.
Test durchgeführt von qualifiziertem
Partner-Labor.

SAMPLES: Sample of safety footwear size 41 article **0033254 – 70299 S3 HRO HI WR SRC.**

See the complete description on the next page.

REQUEST: Laboratory tests in accordance with EN ISO 20345:2011 for the aim of
the EC Certification (Directive 89/686/EEC).

NOTE:

* this document is based on the previous test reports n° 355040, 355116,
350735, 343624, 341110, 352136, 341817, 351138 and 360752.

OUTCOME:  **PASS**

Description:

article: **0033254 – 70299 S3 HRO HI WR SRC**

model: C (calf footwear);

fastening: absent (tubular boot);

processing: direct injection;

outsole: black rubber marked "SAFETY VERA GOMMA HRO OIL RESISTANT ANTISTATIC MADE IN ITALY ABS ANTISHOCK" with size indication (cod. 2137BCP/00 022/ 1/00);

midsole: coffee PU foam (cod. MPI/001);

outer toetip reinforcement: absent;

upper: brown leather DAKAR TREKKING IDRO declared 2,0/2,2 mm thick (cod. DAI/MAR);

vamp and quarter lining: grey fabric SPOTEX TEPOR SELENE (cod. SPO/SELG) that cover the insole;

insole: white multilayer fabric ZP01/1500 (cod. LC/ZP01) with the function of anti-penetration insert;

penetration resistant insert: see insole;

removable insock: perforated black foam matched with black TNT on the foot side, with aluminum insert sewn with antistatic thread (zig-zag seam) on the lower side, "cinghialino nabukato" leather insert "lontra" color (cod. CIF/LON) sewn in the heel area on the foot side (cod. FLNPLCA);

toecap: perforated and reinforced steel art. 604FR (cod. 604ACRF).

TEST REPORT RAPPORTO DI PROVA PRÜFBERICHT

N. 361315/E

date: 12/04/2017

References	Tests	Measuring unit	Requirements	Results		
				39	41	47
Requirement standard (method standard)						
EN ISO 20345:2011 (EN ISO20344:2011)	Safety footwear, class I					
5.2	Design					
5.2.1	Design	-	A, B, C, D, E	C (calf footwear)		
5.2.2 (6.2)	Height of upper	mm	≥ 172 ≥ 178 ≥ 192	231	239	251
5.2.3	Seat region (only B, C, D, E) In the seat region (10 % of the total length), below the minimum height given for design A		Closed No holes	closed pass pass pass		
5.3	Whole footwear					
5.3.1	Sole					
5.3.1.1	Sole construction - with insole - without insole	- -	not removable without damaging the footwear a permanently attached insock shall be present	pass	pass	pass -
5.3.1.2 (5.2)	Upper/outsole bond strength (if not stitched)	N/mm	≥ 4 (if sole tear ≥ 3)	4,0	4,2	4,0 (40% superficial upper delamination 60% clear detachment)

TEST REPORT RAPPORTO DI PROVA PRÜFBERICHT

N. 361315/E

date: 12/04/2017

References	Tests	Measuring unit	Requirements	Results		
				39	41	47
5.3.2	Toe protection					
5.3.2.1	Toecaps Toecaps cannot be removed without damaging the footwear A vamp lining or an element of the upper that serves as lining shall be present Toecaps fulfil the requirements given in EN 12568:2010 p.4.2.2.2 Length of the toecaps edge covering from the back edge: - beneath the toecap - opposite direction - thickness of scuff-resistant coverings for the toe region	- - - mm mm mm	Yes Yes Yes ≥ 5 ≥ 10 ≥ 1	pass pass pass 10 17 -	pass pass pass 10 17 -	pass pass pass 10 17 -
5.3.2.2 (5.3)	Internal length of toecaps - right - left	mm	Size 39- 40 ≥ 38 41- 42 ≥ 39 ≥ 45 ≥ 42	pass pass	pass pass	pass pass
5.3.2.3 (5.4)	Impact resistance Clearance under the toecap after impact (200 J): - right - left The toecap shall not develop any cracks which go through the material	mm	Size 39- 40 ≥ 13,5 41- 42 ≥ 14,0 ≥ 45 ≥ 15,0 pass	14,0 13,5 pass	14,0 14,0 pass	17,0 17,5 pass
5.3.2.4 (5.5)	Compression resistance Clearance under the toecap at a compression load of 15 kN: - right - left	mm	Size 39- 40 ≥ 13,5 41- 42 ≥ 14,0 ≥ 45 ≥ 15,0	14,5 15,5	14,5 15,5	19,5 18,5
5.3.2.5 (5.6)	Behaviour of toecaps			Marked EN 12568		

TEST REPORT RAPPORTO DI PROVA PRÜFBERICHT

N. 361315/E

date: 12/04/2017

References	Tests	Measuring unit	Requirements	Results		
				39	41	47
5.3.4 (5.1)	Ergonomic features					
(5.1) (fig.1)	Task performed before questionnaire by 3 wearers: - 5 min walking at a speed between 4 and 5 km/h - climb and descend 17±3 stairs in 1 min maximum - kneel/crouching down					
(tab.2 p.1)	Is the inside surface of the footwear free from rough, sharp or hard areas that might cause irritation or injury (checked by hand)?		Yes	pass	pass	pass
(tab.2 p.2)	Is the footwear free of features that you consider to make wearing it hazardous?		Yes	pass	pass	pass
(tab.2 p.3)	Can the fastening be adequately adjusted (if necessary)?		Yes	pass	pass	pass
(tab.2 p.4.1)	Can you walk without problems?		Yes	pass	pass	pass
(tab.2 p.4.2)	Can you climb stairs without problems?		Yes	pass	pass	pass
(tab.2 p.4.3)	Can you kneel/crouch down without problems? (not applicable if the footwear is rigid in accordance with 8.4.1)		Yes	pass	pass	pass
5.3.5 (5.11) [EN ISO 13287:2012]	Slip resistance					
5.3.5.2	SRA on ceramic tile floor with NaLS) - forward heel slip (7°) - forward flat slip	- -	≥ 0,28 ≥ 0,32	0,50 0,58	0,41 0,52	0,46 0,52
5.3.5.3	SRB on steel floor with glycerine - forward heel slip (7°) - forward flat slip	- -	≥ 0,13 ≥ 0,18	0,14 0,20	0,15 0,18	0,17 0,21
5.3.5.4	Marking symbol	-	SRA/SRB/SRC		SRC	
	Note: SRC = SRA + SRB					

TEST REPORT RAPPORTO DI PROVA PRÜFBERICHT

N. 361315/E

date: 12/04/2017

References	Tests	Measuring unit	Requirements	Results		
				39	41	47
5.3.6 (ISO/TR 16178:2010)	Innocuousness		Shall not adversely affect the health or the hygiene of the user	Pass (see Customer's declaration)		
5.4	Upper			DAI/MAR		
5.4.3 (6.3) EN ISO 3377-2:2002 EN ISO 4674-1:2003/B	Tear strength - leather - coated fabric and textile	N N	≥ 120 ≥ 60	299 -	299	299
5.4.6 (6.6- 6.7- 6.8)	Water vapour permeability Water vapour coefficient	mg/(cm ² ·h) mg/cm ²	≥ 0,8 ≥ 15	2,6 28,6	2,6	2,6 28,6
5.4.7 (6.9) EN ISO 4045:2008	pH value (leather) differential figure (if pH < 4)	- -	≥ 3,2 < 0,7	3,75 0,60		
5.4.9 (6.11) ISO17075:2007 #	Chromium VI content (leather)	mg/kg	≤ 3	< 3		
5.5	Vamp and Quarter lining			SPO/SELG		
5.5.1 (6.3) EN ISO 3377-2:2002 EN ISO 4674-1:2003/B	Tear strength - leather - coated fabric and textile	N N	≥ 30 ≥ 15	42,5	42,5	- 42,5
5.5.2 (6.12)	Abrasion resistance Quarter lining: - 25 600 cycles dry - 12 800 cycles wet Seat region lining: - 51 200 cycles dry - 25 600 cycles wet		no hole development on the wearing surface no hole development on the wearing surface	pass pass	pass pass	pass pass
5.5.3 (6.6- 6.7- 6.8)	Water vapour permeability Water vapour coefficient	mg/(cm ² ·h) mg/cm ²	≥ 2,0 ≥ 20	2,6 21,3	2,6	2,6 21,3
5.7	Insole			LC/ZP01		
5.7.1 (7.1)	Thickness	mm	≥ 2,0	3,7	3,7	3,7

TEST REPORT RAPPORTO DI PROVA PRÜFBERICHT

N. 361315/E

date: 12/04/2017

References	Tests	Measuring unit	Requirements	Results		
				39	41	47
5.7.3 (7.2)	Water absorption	mg/cm ²	≥ 70	119	119	119
	Water desorption	%	≥ 80	100	100	100
5.7.4.1 (7.3)	Abrasion resistance "Veslic" 400 cycles		abrasion damage shall not be more severe than that illustrated by the reference test pieces (CEN TC 161)	pass	pass	pass
5.7	Insock			FLNPLCA		
5.7.2 (6.9) EN ISO 4045:2008	pH value (leather)	-	≥ 3,2	4,10		
	differential figure (if pH < 4)	-	< 0,7	-		
5.7.3 (7.2)	Water absorption	mg/cm ²	≥ 70	N.A. (permeable to water)		
	Water desorption	%	≥ 80			
5.7.4.2 (6.12)	Abrasion resistance - 25 600 cycles dry - 12 800 cycles wet		no hole development on the wearing surface	pass pass	pass pass	pass pass
5.8	Outsole			2137BCP/00 022/1/00		
5.8.1	Design Outsoles with a cleat height of less than 2,5 mm are regarded as uncleated	-	Cleated / uncleated	Cleated		
5.8.1.1 (8.1.2)	Thickness d ₁ - non-cleated outsole - cleated outsole	mm mm	≥ 6 ≥ 4	9,0	- 10	13
	5.8.1.2 (fig.38) Cleated area Relationship between sole length and length of the cleated zone: - front - back	- - -	Cleats shall be open to the side ≥ 0,45 ≥ 0,25	pass 0,53 0,31	pass 0,52 0,32	pass 0,50 0,31
5.8.1.2 (8.1)	Cleat height d ₂	mm	≥ 2,5	4,3	4,4	4,8
ISO 2781:2008 Amd 1:2010	Outsole density (method A)	g/cm ³		1,13		

TEST REPORT RAPPORTO DI PROVA PRÜFBERICHT

N. 361315/E

date: 12/04/2017

References	Tests	Measuring unit	Requirements	Results		
				39	41	47
5.8.2 (8.2) ISO 34-1:2011 (method A)	Tear strength - material with density > 0,9 g/cm ³ - material with density ≤ 0,9 g/cm ³	kN/m kN/m	≥ 8,0 ≥ 5,0	17,0	17,0 -	17,0
5.8.3 (8.3) ISO 4649:2010 (method A)	Abrasion resistance - material with density > 0,9 g/cm ³ - material with density ≤ 0,9 g/cm ³	mm ³ mm ³	≤ 150 ≤ 250	107	107 -	107
5.8.4 (8.4.2)	Flexing resistance - cut growth after 30 000 flex cycles - spontaneous cracks	mm -	≤ 4 not present (with some exceptions)	0	0 not present	0
5.8.6 (5.2)	Interlayer bond strength	N/mm	≥ 4,0 (≥3,0 in case of sole tear)	7,0	7,2	6,5 (midsole delamination)
6	Additional requirements					
6.2	Whole footwear					
6.2.1	Penetration resistance (P)					
6.2.1.1.2 (5.8.3)	Non-metallic insert Using a force of at least 1 100 N - right - left	- -	The tip of the test nail does not protrude from the test piece	pass pass	pass pass	pass pass
6.2.1.2	Construction - penetration resistant insert cannot be removed without damaging the footwear; - metallic inserts shall be positioned under the base of the toecap.	- -	Yes Yes	pass	pass -	pass

TEST REPORT RAPPORTO DI PROVA PRÜFBERICHT

N. 361315/E

date: 12/04/2017

References	Tests	Measuring unit	Requirements	Results		
				39	41	47
6.2.1.3 (5.8.1)	Dimensions - maximum distance from the edge of the insert to the feather edge of the last whole circumference, heel excepted: - right - left heel: - right - left Number of holes Diameter of holes Holes shall not lie in the shaded area 1 of figure 13 (Holes in the shaded area 2 are disregarded)	mm mm - mm -	 ≤ 6,5 ≤ 17 ≤ 3 ≤ 3 Yes	 0 0 0 0 0 0	 0 0 0 0 - -	 0 0 0 0 - -
6.2.1.5	Penetration-resistant inserts			Marked EN 12568:2010		
6.2.2	Electrical properties					
6.2.2.2 (5.10)	Antistatic footwear (A) After conditioning in: Dry atmosphere 7days/30% r.h. - right - left Wet atmosphere 7days/85% r.h. - right - left	MΩ MΩ	> 0,1 and ≤ 1 000 > 0,1 and ≤ 1 000	210 190 21,5 17,2	185 250 18,3 20,0	197 200 15,5 24,3
6.2.3	Resistance to inimical environments					
6.2.3.1 (5.12) R.F.U CNB/P/10.109	Heat insulation of sole complex (HI) 30 min/+150°C - temperature increase on the upper surface of the insock: - the insulation shall be incorporated in the footwear in such a manner that it cannot be removed without damaging the footwear; - no signs of degradation as described in B.2	°C - -	≤ 22 Yes Yes	13,5 pass pass	12,5 pass pass	11,5 pass pass

TEST REPORT RAPPORTO DI PROVA PRÜFBERICHT

N. 361315/E

date: 12/04/2017

References	Tests	Measuring unit	Requirements	Results		
				39	41	47
6.2.4 (5.14)	Energy absorption of seat region (E) - right - left	J	≥ 20	37 38	45 45	47 47
6.2.5 (5.15.1)	Water resistance (WR) Total wetted area inside the footwear: after 100 trough lengths - right - left	cm ²	≤ 3		- -	
(5.15.2)	or after 80 min. - right - left	cm ²	≤ 3	0 0	0 0	0 0
6.3 (6.13)	Upper- Water penetration and absorption (WRU) - water penetration after 60 min. - water absorption after 60 min. Non-functional and decorative stitching and perforations if used: - water penetration after 60 min. - water absorption after 60 min. or requirement in 6.2.5 (WR) is met	g % g % -	≤ 0,2 ≤ 30 ≤ 0,2 ≤ 30 Yes	0 6,0	0 6,0	0 6,0
6.4	Outsole					
6.4.1 (8.7)	Resistance to hot contact (HRO)		outsoles shall not melt and develop any cracks when bent	pass	pass	pass
6.4.2 (8.6.1)	Resistance to fuel oil (FO) - increase in volume If the test piece shrinks more than 1 % in volume or increases in hardness by more than 10 Shore A hardness units: Ross- flex (150 000 cycles/- 5°C) after conditioning 22h/isooctane - cut growth	% mm	≤ 12 ≤ 6	3,2	3,2	3,2

End of the test report.