



# TECHNICAL DATA SHEET

## General information

Size range	
• EU	36 - 48
• UK	3.5 - 13
• US	4 - 15
The testresults in this technical datasheet are performed on size EU 42, UK 8, US 9.	
Weight / pair	
• Safety level: Steel toe cap & midsole	± 57.64 oz
Colors	
	green - black

## Upper

A. Dimensions	
• Height	outer measure: 15.0 in
	cutting edge: 12.2 in
• Foot length	outer measure: 12.0 in
	inner measure: 11.0 in
B. Thickness	
• Upper edge	0.11 - 0.13 in
• Calf	0.11 - 0.12 in
• Shinbone	0.11 - 0.11 in
• Ankle	0.14 - 0.15 in
• Heel	0.15 - 0.21 in
C. Raw material	
	NEOTANE (proprietary polyurethane compound)
D. Density	
	86.8 - 93.5 oz/gal (U.S.)
E. Tensile strength	
(incl. lining)	1450 ± 290 psi
F. Elongation	
(incl. lining)	600 +/- 100%

<b>G. Hardness</b>		
	43 +/- 2 Sh A	
<b>H. Tear strength</b>		
(incl. lining) lbf/in	57.1 ± 11.4 lbf/in	
<b>I. Aging</b>		
(incl. lining)	<b>7 days at 158 °F</b>	<b>14 days at 158 °F</b>
• Tensile strength	1682.4 psi	1305.3 psi
• Elongation	580 ± 20%	600 ± 20%
• Tear strength	65.1 lbf/in	51.4 lbf/in
<b>J. Chemical resistance</b>		
	see detailed list	
<b>K. Environmental temperature</b>		
• Maximum	± 212 °F	
• Minimum	Cold insulation down to -4 °F	

## Lining

<b>A. Material</b>	
	PU coating on polyester fabric
<b>B. Seams</b>	
	Knitted seams

## Outsole profile



### A. Dimensions

#### • Heel

• Thickness	(a)	1.3 in
• Profile depth	(b)	0.34 in
• Length	(c)	3.6 in
• Width		3.2 in

#### • Middle foot

• Height	(d)	0.47 in
• Ladder anti-slip grips	(e)	0.08 in

#### • Outsole

• Thickness	(f)	0.92 in
	(g)	0.79 in
	(h)	0.70 in
• Profile depth	(i)	0.26 in

### B. Raw material

NEOTANE (proprietary polyurethane compound)

### C. Density

6.5 - 7.0 ppg (imp.)

### D. Mechanical characteristics

See upper (E)-(F)-(H)

### E. Energy absorption of the seat region

25-35 J (requirement  $\geq 20$  J)

### F. Antistatic

dry:  $1 \times 10^8 - 1 \times 10^9$  Ohm

wet:  $1 \times 10^7 - 1 \times 10^9$  Ohm

### G. Abrasion resistance




0.0031 in<sup>3</sup>

<b>H. Hardness</b>	
	60 +/- 10 Sh A
<b>I. Footwear slip resistance</b>	
	SR
<b>J. Chemical resistance</b>	
	see detailed list

## Safety

	Standard	Required	Type	Result
<b>Toe cap &amp; midsole</b>				
Nail penetration resistance	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024	> 1100 N	Metallic	1345 N
Impact resistance (200J)	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024	> 0.55 in	Metallic	0.61 in
Impact resistance (125J)	CSA Z195-14	> 0.50 in	Metallic	0.65 in
Impact resistance at -0.4 °F (125J)	CSA Z195-14	> 0.50 in	Metallic	0.85 in
Compression resistance	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024	> 0.55 in	Metallic	0.71 in
Compression resistance	ASTM F2413-24	> 0.50 in	Metallic	0.85 in
Width of toe cap	outer measure: 1.7 in			
Height of toe cap	outer measure: 3.4 in			
Toe cap	Steel			

## Certificates

	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024 2409249-02-86
	EN ISO 20345:2011 AB0321/19216-01/E00-00
	CSA Z195-14 70048629
	ASTM F2413-24 70048629

## Accessories

### Insole

Three layers

• Toplayer	woven textile
• Color	green
• Thickness	0.03 in
• Interlayer	needle felt
• Color	cyan blue
• Thickness	0.12 in
• Bottom	gel latex
• Color	black
• Thickness	0.04 in



**Washable at 86 °F**