

TECHNICAL SHEET



Article:
 Norm:
 Safety Class:
 Footwear height:
 Width:
 Weight (size 42)
 Construction:

Cleaning and
 maintenance:

Suggested fields:

B0850 BE-OSLO
UNI EN ISO 20345:2011
S3 CI HI HRO WR SRC
Mod. C, H 195 mm (≥ 178 mm; Rif. EN 20345-5.2.2)
12
480 gr.
STROBEL; INJECTED BIDENSITY SOLE - LIFE PLUS
PU/GUMMI
 Use only soft brushes and water. Do not use substances like alcohol, thinners, gasoline, oil or any other chemicals. Keep the footwear, dry and clean, in a proper place at room temperature.
Construction, agriculture, miner, extractive
platforms, heavy industry, light industry,
shipbuilding, big plants, handicraft.

Entire footwear: components				
Component	Description	Value	Norm Requirements	EN 20345
Metal-free	Impact resistance (200 J)			
SLIMCAP	• Free height after impact	14,5 mm	≥ 14 mm	5.3.2.3
toe-cap	Compression resistance (15 kN)			
	• Free height after compression	15,0 mm	≥ 14 mm	5.3.2.4
Sole (SRC)	Slip resistance			
	• SRA – sole (entire sole)	0,62	≥ 0,32	5.3.5.4
	• SRA – heel (angle of 7°)	0,53	≥ 0,28	5.3.5.4
	• SRB – sole (entire sole)	0,31	≥ 0,18	5.3.5.4
	• SRB – heel (angle of 7°)	0,27	≥ 0,13	5.3.5.4
Fresh'n Flex (P)	Puncture resistance	No perforation	≥ 1100 N	6.2.1
Footbed (A)	Antistatic properties			
	• Electrical resistance	Dry: 7,26 x 10 ⁸ Ω	≥ 10 ⁵ Ω , ≤ 10 ⁹ Ω	6.2.2.2
		Humid: 1,38 x 10 ⁸ Ω	≥ 10 ⁵ Ω , ≤ 10 ⁹ Ω	6.2.2.2
Sole/upper	Thermal insulation			
Heat (HI)	• Insole temperature increase	N/A	≤ 22°C	6.2.3.1
Cold (CI)	• Insole temperature decrease	13,5° C	≤ 10°C	6.2.3.2
Cold -30°C	• Insole temperature decrease	7,5° C	≤ 10°C	6.2.3.2 *
Heel (E)	Shock-absorption in the heel region	34 J	≥ 20 J	6.2.4
(WR)	Water resistance (water absorption)	<3 cm ² wet area after 15000 cycles	≤3 cm ² wet area after 4800 cycles	6.2.5
(M)	Metatarsal protection	N/A	≥ 40 mm	6.2.6

*Test modified at – 30°C

Upper				
Component	Description	Value	Norm requirements	EN 20345
	Tear resistance	176 N	≥120 N	5.4.3
Grain leather +	Traction resistance	N/A	≥ 15 N/mm ²	5.4.4
H2STOP	Water steam permeability	1,2 mg/cm ² h	≥ 0,8mg/cm ² h	5.4.6
membrane	Water steam coefficient	16 mg/cm ²	≥ 15 mg/cm ²	5.4.6
	pH value	4,02	≥ 3,2	5.4.7
	Chromium VI	Not detected	Not detectable	5.4.9
	Water passed	0,0 g	≤ 0.2 g	6.3
	Water absorption	12%	≤ 30%	6.3

Lining				
Component	Description	Value	Norm Requirements	EN 20345
Primaloft	Tear Resistance	75 N	≥ 15 N	5.5.1
	Abrasion resistance	- Dry: the surface shows no holes - Humid: the surface shows no holes	No holes till 51.200 cycles	5.5.2
			No holes till 25.600 cycles	5.5.2
	Water vapour permeability	11,8 mg/cm ² h	≥ 2,0 mg/cm ² h	5.5.3
	pH value	N/A	Not detectable	5.5.4
	Chromium VI	N/A	Not detectable	5.5.5

Insole				
Component	Description	Value	Norm requirements	EN 20345
Fresh'n Flex	Thickness	3,7 mm	≥ 2,0 mm	5.7.1
	pH value	N/A	Not detectable	5.7.2
	Water absorption	86 mg/cm ²	≥ 70 mg/cm ²	5.7.3
	Water release	94%	≥ 80 %	5.7.3
	Abrasion resistance (after 400 cycles)	No damage	Damage ≤ to norms reference	5.7.4.1
	Chromium VI	N/A	Not detectable	5.7.5

Removable footbed				
Component	Description	Value	Norm requirements	EN 20345
Dry'n Air Omnia	Thickness	3±0,5 mm (tip) 11±0,5 mm (heel)	N/A	5.7.1
	pH value	N/A	Not detectable	5.7.2
	Water absorption	Permeable through the holes	Permeable or ≥ 70mg/cm ²	5.7.3
	Water release	Permeable through the holes	Permeable or ≥ 80%	5.7.3
	Abrasion resistance	No damage	Dry: no holes till 25600 cycles humid: no holes till 12800	5.7.4.2
	Chromium VI	N/A	Not detectable	5.7.5

*Footwear also certified with DRYN AIR SCAN&FIT OMNIA AND b07 footbeds

Sole				
Component	Description	Value	Norm requirements	EN 20345
Midsole PU; Outsole Gummi	Sole thickness without profiles	10 mm	≥ 4 mm	5.8.1.1
	Profile height	3,5 mm	≥ 2,5 mm	5.8.1.3
	Tear resistance	9,5 kN/m	≥ 8 kN/m	5.8.2
	Abrasion resistance	110 mm ³	≤ 250 mm ³	5.8.3
	• Relative volume loss			
	Flexion resistance	2,2 mm	≤ 4 mm	5.8.4
	• Notches increase after 30.000 cycles			
	Hydrolysis	3,2 mm	≤ 6mm	5.8.5
	• Notches increase after 150.00 cycles			
	Outsole-Midsole detachment	3,7*	≤ 4 N/mm; (*) ≤ 3 N/mm with sole ripping	5.8.6
	(HRO) (Contact heat resistance 300°C)	No damage	No damage (melting, breaking)	6.4.1
	(FO) Fuel resistance (volume variations)	4,6 %	≤ 12%	6.4.2

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