

TECHNICAL SHEET



Article: **B0883 BE-BROWNY TOP**
 Norm: **UNI EN ISO 20345:2012**
 Safety Class: **S3 CI SRC**

Footwear height: **Mod. B, H 145 mm (≥ 113 mm, Rif. EN 20345-5.2.2)**

Width: **12**

Construction: **STROBEL; 4X4 PU/TPU-SKIN sole, injected**

Cleaning and maintenance: 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.

Suggested fields: **Mechanics, Construction Industry, Services, Crafts, Light Industry, Construction Site, Automotive, Automated Assembly Lines.**

Entire footwear: components				
Component	Description	Value	Norm Requirements	EN ISO 20345
Metal-free SLIMCAP toe-cap	Impact resistance (200 J) • Free height after impact	15 mm	≥14 mm	5.3.2.3
	Compression resistance (15 kN) • Free height after compression	15 mm	≥14 mm	5.3.2.4
Sole (SRC)	Slip resistance • SRA – sole (entire sole) • SRA – heel (angle of 7°) • SRB – sole (entire sole) • SRB – heel (angle of 7°)	0,45 0,40 0,32 0,28	≥ 0,32 ≥ 0,28 ≥ 0,18 ≥ 0,13	5.3.5.4 5.3.5.4 5.3.5.4 5.3.5.4
Fresh'n Flex ESD (P)	Puncture resistance	No perforation	≥ 1100 N	6.2.1.1.2
Footbed (A)	Antistatic properties • Electrical resistance	Dry 5,8 x 10 ⁸ Ω Humid 8,8 x 10 ⁹ Ω	≥ 10 ⁵ Ω, ≤ 10 ⁹ Ω ≥ 10 ⁵ Ω, ≤ 10 ⁹ Ω	6.2.2.2 6.2.2.2
Sole/upper Heat (HI)	Thermal insulation • Insole temperature increase	N/G	≤22°C	6.2.3.1
Cold (CI)	• Insole temperature decrease	N/G	≤10°C	6.2.3.2
Heel (E)	Shock-absorption in the heel region	36 J	≥ 20 J	6.2.4
(WR)	Water resistance (water absorption)	N/A	≤ 3 cm ²	6.2.5
		N/A	≥40 mm	6.2.6

Upper				
Component	Description	Value	Norm requirements	EN 20345
Oiled grain leather	Crack resistance	133 N	≥120 N	5.4.3
	Abrasion resistance	N/A	≥ 15 N/mm ²	5.4.4
	Water steam permeability	4,5 mg/cm ² h	≥0.8 mg/cm ² h	5.4.6
	pH value	4,0	≥ 3,2	5.4.7
	Chromium VI content	Not detected	Not detected	5.4.9
	Water passed	0,0 g	≤ 0.2 g	6.3
	Water absorption	8,4 %	≤ 30%	6.3

Lining				
Component	Description	Value	Norm Requirements	EN 20345
Hi-tech 3D Fabric	Tear Resistance	47 N	≥ 15 N	5.5.1
	Abrasion resistance	· Dry: the surface shows no holes	No hole till 51.200 cycles	5.5.2
		· Humid: the surface shows no holes	No hole till 25.600 cycles	5.5.2
	Water steam release	21,1 mg/cm ² h	≥ 2,0 mg/cm ² h	5.5.3
	pH value	N/A	Not detectable	5.5.4
	Chromium VI content	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/G	Nicht feststellbar	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	Schaden ≤ in Bezug auf den Normerfordernis	5.7.4.1
	Chromium VI	N/A	Nicht feststellbar	5.7.5

Removable footbed				
Component	Description	Value	Norm requirements	EN 20345
Anatomical, breathable, textile and expanded polymeric material	Thickness	3,5±0,5 mm	N/A	5.7.1
	pH value	N/A	Not detectable	5.7.2
	Water absorption	Permeable	Permeable or ≥ 70mg/cm ²	5.7.3
	Water release	Permeable	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

Sole				
Component	Description	Value	Norm requirements	EN 20345
PU Midsole;	Sole thickness without profiles	6 mm	≥ 4 mm	5.8.1.1
	Profile height	4,0 mm	≥ 2,5 mm	5.8.1.3
	Tear resistance	6,0 kN/m	≥ 8 kN/m	5.8.2
TPU- SKIN Outsole (high density TPU)	Abrasion resistance	65 mm ³	≤ 150 mm ³	5.8.3
	• Relative volume loss			
TPU- SKIN Outsole (high density TPU)	Flexion resistance	2,0 mm	≤ 4 mm	5.8.4
	• Notchesincreaseafter30.000 cycles			
TPU- SKIN Outsole (high density TPU)	Hydrolysis	4,0 mm	≤ 6 mm	5.8.5
	• Notchesincreaseafter 150.00 cycles			
TPU- SKIN Outsole (high density TPU)	Sole thickness without profile	N/A	≤ 4 N/mm; (*) ≤ 3 N/mm with sole ripping	5.8.6
	(HRO) (Contact heat resistance 300°C)	N/A	No damage (melting, breaking)	6.4.1
	(FO) Fuel resistance (volume changes)	3 %	≤ 12%	6.4.2

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