



EN ISO 20345:2011

Class: S3 SRC
 Sizes: 36-47
 Instep: 11
 Weight(±10%):530 gr.
 (*)= Indicative weight ½ pair size 42

TECHNICAL SHEET ART. ONYX Black 978U-032

Description Low cut shoe Made in Full Grain Water-repellent leather, Black color, 100% Polyamide Lining, Fiberglass toecap 200 J., Non metallic TEX ZERO antipuncture insole, Light & Soft antistatic insole, bi-density (polyurethane-polyurethane) sole, abrasion resistant, oil resistant, and antistatic.

Suggested sectors of usage Automotive, Craftmanship, Logistics, Utilities, Light industry and Maintenance

Care and Maintenance Clean periodically the outsole and the upper with non aggressive substances which could compromise quality, safety and durability of the shoe, do not dry close to direct heat source



Complete shoe	Norm	Description	Unit	Pezzol result	EN ISO 20345 requirement	
Toe cap: FIBERGLASS Non-metallic toe cap, impact resistant 200 J	5.3.2.3	Impact resistance	mm	14,0	>= 14	
	5.3.2.4	Compression resistance	mm	17,0	>= 14	
Midsole: TXZERO Non-Metallic Textile Multi-Layer antipuncture Midsole	6.2.1.1	Perforation resistance	N	Pass	>= 1.100	
Antistatic footwear: dissipation capacity of the electrostatic charge	6.2.2.2	Electric resistance				
		- Wet	Mohm	1,05x10(8)	>= 1 x 10(5)	
		- Dry	Mohm	3,43x10(8)	<= 1 x 10(9)	
Energy absorption of the seat region	6.2.4	Energy absorption in the heel area	J	26,0	>= 20	
Upper: Full Grain Leather , Water-resistant, Thickness 1.8/2.0 mm.	5.4.6	Water vapour permeability	mg/cmq h	5,0	>= 0,8	
	6.3.0	Water absorption		14%	<= 30%	
	5.4.3	Tearing Strength	N	184	>= 120	
Vamp lining: non woven textile for toe cap, grey color	5.5.3	Water vapour permeability	mg/cmq h	4,2	>= 2	
		Coefficient of permeability	mg/cmq	36,8	>= 20	
	5.5.1	Tearing Strength	N	31	>= 15	
	5.5.2	Abrasion resistance (dry)	cycles	no rupture	25.600	
		Abrasion resistance (wet)	cycles	no rupture	12.800	
Quarter lining: 100% honeycomb finished polyester, breathable, abrasion resistant,	5.5.3	Water vapour permeability	mg/cmq h	4,8	>= 2	
		Coefficient of permeability	mg/cmq	38,7	>= 20	
	5.5.1	Tearing Strength	N	23,0	>= 15	
	5.5.2	Abrasion resistance (dry)	cycles	no rupture	51.200	
		Abrasion resistance (wet)	cycles	no rupture	25.600	
Removable insock textile+PU: Textile PA100%+High abrasion resistant PU	5.7.3	Water Absorption	Mg/cm ²	70	>= 70	
		Water Desorption (Ability to release water)		99%	>= 80%	
Sole: Polyurethane outsole high density applied to a polyurethane midsole with low density and completely injected; abrasion resistant, oil resistant, antistatic	5.8.2	Tearing Strength	kN/m	10,5	>= 8	
	5.8.3	Abrasion resistance (**)	mm ³	62	<= 150	
	5.8.4	Bending resistance (int.test after 30.000 flex)	mm	2,0	<= 4	
	6.4.2	Hydrocarbons resistance (volume increase)	%	0,1%	<= 12%	
	5.1.1	Slip resistance on ceramic floor with water and detergent	flat		0,38	>= 0,32
			inclined		0,33	>= 0,28
			flat		0,19	>= 0,18
	Slip resistance on steel floor with glycerine	inclined		0,14	>= 0,13	

(**)= Abrasion resistance to the bitter end = 1800 Cycles
 Previous test result = 900 Cycles
 Standar CE norm = 200 Cycles

Chromium VI: undetectable, less than the detection limit of the method (3mg/kg)

Azo dyes: Under the conditions described in the tests, are not were detected in this component azo dyes prohibited by the Directive 2002/61 / EC of 19 July 2002 relating to restrictions on placing on the market and use of certain dangerous substances and preparations (azocolourants)

Method UNI EN ISO 17234 -1: 2010 - Leather, chemical analysis - Determination of certain azo colorants in finished leathers - Analysis cromotografica high performance HPLC - Gas Analysis

