NON-METALLIC SAFETY SHOE
(REF. UL 100)

TECHNICAL SPECIFICATION

CE EN ISO 20345:2004

1-SUBJECT

This specification covers the technical specifications, control and test methods of Non-metallic safety shoe – UL100
The boot is complying with EN ISO 20345:2004 standard. All tests are made according to European standard EN ISO 20344:2004

2- SPECIFICATIONS

A. GENERAL

This shoe is designed according to the field conditions. All materials provide comfort and flexibility in usage aera.
Full grain leather in black colour
Padded collar and tongue for comfort
Non-metallic toe cap (impact resistant to 200 Joules)
Eyelets/Rings are non-metallic
Footbed: Sweat absorber, anti-bacterial, anti-static, washable inlay sole
Direct injection, double density polyurethane sole
Size range is between 36 – 48 French Sizing / 3 – 13 British Sizing
Standards : European (EN ISO 20345)

B. TECHNICAL SPECIFICATION

LEATHER :

Upper Material :	Full grain leather
Colour :	Black
Thickness :	1,8 – 2,0 mm
Breaking strength :	2.2 kg/mm^2 (minimum)
Tearing strength :	2 kgf/mm (minimum)
pH value :	3,5 (minimum)

QUARTER / TONGUE :

Material :	Nylon 6.6 Cordura by Dupont / Invista
Colour :	Black
Weaving :	Plain, 1000 Denier
Breaking strength :	Warp : 275 kgf (minimum)
	Weft : 230 kgf (minimum)
Tearing strength :	Warp : 35 kgf (minimum)
	Weft : 35 kgf (minimum)
Water Repellency :	4 (minimum)
Colour Fastness :	4 (minimum)

LINING :

Property :	Breathable and sweat absorber
Material :	Non-woven textil (cambrelle)
Abrasion :	Wet - 25600 revs (minimum)
	Dry - 12800 revs (minimum)
Tearing strength :	15 newton (minimum)

LASTING INSOLE BOARD :

Property :	Anti-static , Anti-bacteriel and sweat absorber
Material :	Non-woven fibre board
Thickness :	2,5 mm (minimum)
Cracking angle :	90 degree (minimum)

SUPPORTS :

Toe cap :	Steel
Impact Resistance :	200 Joules (minimum)
Ankle (stiffener) support :	Thermoplastic
Thickness :	1,6 mm (minimum)

ACCESSORIES AND OTHERS :

Eyelets (lacing hole) :	4 pairs per boot
	Rustproof
Sewing thread:	100 % polyester or 100 % polyamide
Laces:	100 % polyester or 100 % polyamide
	Length: According to the boot

SOLE :

Property :	Direct injection, Double density polyurethane
	Light weight , flexible , high performance and comfort
	Direct injection provides durability and resistance against sole-upper separation
	Anti-staticness provides to minimize electrostatic build up To avoid the risk of spark ignition.
	Energy Absorbing Heel provides comfort when jumping walking, running , etc. by absorbing downward force in excess of a body weight
	Oil Resistant outsole
	Slip resistant outsole according to EN 13287
	Heat resistant up to 100 ^{0}C degree
Material :	Polyurethane
Slip resistance :	0,4 (minimum)

Flexing resistance :	4 mm (maximum)
Abrasion resistance :	If density < 0,9 : volume loss 250 mm3 (maximum)
	If density > 0,9 : volume loss 150 mm3 (maximum)
Tearing strength :	8 kn/mm (minimum)
Energy absorbtion :	20 joules (minimum)
Electrical resistance :	0,1 megaohm (minimum) – 1000 megaohm (maximum)
Upper / outsole bonding:	4 newton/mm (minimum)

3 – QUALITY ASSURANCE

All raw materials before production and all finished products after production are being tested in our laboratory which has been accredited by SATRA Notified Body in UK and The Turkish Accreditation Agency (TURKAK).
Quality is supported by the implementation of ISO 9001:2008 and membership of SATRA (international laboratory and notified body in U.K.) to audit and test the product.
Product is according to European Standards called EN ISO 20345 and marked with **CE** label.

	P0001 – 0321	: Manufacturer – Notified Body reference nr
CE	EN ISO 20345:2004	: Number of European standard of occupational footwear for professional use
	S2 SRA	: Type of classification
	G2100-03	: Product group identification
	UL110 – 05/11	: Product ref. – Month/Year of manufacture

Each pair of boot has a customer information leaflet which is put in inner boxes. This leaflet includes information about product, standard and product care.

4 - LABELLING AND PACKAGING

LABELLING:

CE label is stitched inside tongue and each pair bears this CE marking.
Each inner box bears a label sticker which shows product name and size of the boot.
Each outer box bears a label sticker which shows product name and size of the boot and quantity pairs.

PACKAGING:

Each pair of boot is packed separately in tough cardboard box (inner box). Then one set will be packed together.
10 pairs of boots are packed in a ripped cardboard box (outer box). This quantity can be changed according to customer requirement.
Final packaging shall maintain enough protection to prevent any damage of goods under normal shipment and handling conditions.