

ATHARVA

LABORATORIES PVT. LTD.

TEST CERTIFICATE



(BIS & NABL ACCREDITED AND RITES, NAVY,
DGS&D, DGAOS, AIRPORT AUTHORITY APPROVED LAB)
: Mayur Leather Products Ltd.

Manufacturer Name : Mayur Leather Products Ltd.
Manufacturer Address : G-60-62 & 67-69 Jaitpura, B-5, Vrindavan Apt. Vrindavan Vihar. King's Road. Jaipur-19
Country Origin : India.
Contact Person : Mr. S.K.Neogi
Test Report No. : A1505140
Report Issue date : 28.05.2015
Date of Entry : 19.05.2015
Description of product : Shoe
Date of Manufacturer : April, 2015
Batch/Model/Serial No. : SAFETECH 2688 S3 PU
Colour : Black
Job Start Date : 19.05.2015
Specification : ISO20345:2011
Job Completion Date : 28.05.2015
Conditioning : Samples were conditioned for 48 Hrs at 23±2°C & 50±5 %RH
Sampling Method : N.A
Total Pages : 05
Laboratory Environment Temperature: 23 ± 2°C
Relative Humidity : RH 50 ± 5%

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Test Report No.: A1505140
Sample submitted by: Mayur Leather Products Ltd.

Date of Report : 28.05.2015
Sample drawn from: Supplied by party

Design of footwear: Design- A
Date of test: 19.05.2015 to 28.05.2015

Analyst : Mr. Snehashish Nandi

Testing as per OS ISO20345:2011 Personal Protective Equipment- Safety footwear

St. Closure	Standard Parameters	Test result
5	Basic requirement for safety footwear	Design (A)
5.2	Design (A)	71.2 mm
5.2.1	Height of Upper (<113 mm)	Closed
5.2.2	Seat region	
5.3	Whole footwear	
5.3.1	Sole performance	Insole Cannot be removed without damaging the Footwear
5.3.1.1	Construction	4.7 N/mm
5.3.1.2	Upper/outsole bond strength (min. 4.0 N/mm)	
5.3.2	Toe protection	44.2
5.3.2.2	Internal length of toecaps (min. 39 mm)	18.9 mm
5.3.2.3	Impact resistance (>14.0 mm)	20.7 mm
5.3.2.4	Compression resistance (>14.0 mm)	No corrosion observed
5.3.2.5	Behavior of toecaps (5 areas of corrosion none >2.5mm ² in area.)	
5.3.3	Leakproofness (Shall be no leakage of air)	NA
5.3.4	Specific ergonomic features	NA
5.3.5	Slip resistance	NA
5.4	Upper	NA
5.4.2	Thickness	241.2
5.4.3	Tear strength (Leather 120N, Coated fabric+Tex. 60N)	23.2 N/mm ²
5.4.4	Tensile properties (15N/mm ² or 150kg/cm ²)	NA
5.4.6	Flexing resistance	1.7 mg/cm ² hr
5.4.6	Water vapor permeability (>0.8 mg/cm ² h) and Coefficient (>15 mg/cm ²)	17.2 mg/cm ²
5.4.8	Hydrolysis (150000 flex cycle- no cracking)	NA
5.4.9	Chromium VI content (Not detected)	Not Detected

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St. Closure	Standard Parameters	Test result
5.5	Vamp lining	42.2 N
5.5.1	Tear strength (Leather 30N min., coated fabric& textile 15N min.)	NA
5.5.4	pH value (3.2 min)	No Hole seen
5.5.2	Abrasion resistance (Dry 25600 & Wet 12800 cycles)	10.4 mg/cm ² h
5.5.3	Water vapor permeability (>2 mg/cm ² h) and coefficient(>20 mg/cm ²)	111.8 mg/cm ²
5.5.5	Chromium VI content (Not detected)	NA
5.5	Quarter lining	23.7 N
5.5.1	Tear strength (Leather 30N min., coated fabric& textile 15N min.)	No Hole seen
5.5.2	Abrasion resistance (Dry 25600 & Wet 12800 cycles)	16.2 mg/cm ² h
5.5.3	Water vapor permeability (>2 mg/cm ² h) and coefficient (>20 mg/cm ²)	153.1 mg/cm ²
5.5.4	pH value (3.2 min)	NA
5.5.5	Chromium VI content (Not detected)	NA
5.6	Tongue	162.4 N
5.6.1	Tear strength (Leather 36N min., coated fabric& textile 18N min.)	6.1
5.6.2	pH value (3.2 min)	Not Detected
5.6.3	Chromium VI content (Not detected)	
5.7	Insole and Insock	2.2
5.7.1	Thickness (min 2.0 mm)	NA
5.7.2	pH value (3.2 min)	81.0 mg/cm ²
5.7.3	Water absorption (min 70 mg/cm ²) and desorption (min 80%)	>80 %
5.7.4	Abrasion resistance	No Hole seen
5.7.4.2	(Dry 25600 & Wet 12800 cycles)	No Hole seen
5.7.4.1	(There shall no surface tearing before 400 cycles.)	Not detected
5.7.5	Chromium VI content (Not detected)	
5.8	Out sole	NA
5.8.1	Thickness of non - Cleated outsole (>6.0 mm)	6.2 kN/m
5.8.2	Tear strength (>5.0 kN/m)	92.5 mm ³
5.8.3	Abrasion resistance (< 250 mm ³ for Density < 0.9 gm/cc)	1.7
5.8.3	Flexing resistance (4 (Max) cut growth before 30,000 flex cycle)	2.8
5.8.5	Hydrolysis (6 (Max) cut growth before 1,50,000 flex cycle)	NA
5.8.6	Interlayer bond strength (min. 4.0 N/mm ² for PU Double Density)	
5.8.7	Resistance to fuel oil (max. 12%)	2.4 %

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St. Closure	Standard Parameters	Test result
6	Additional requirements for safety footwear	
6.2	Whole footwear	Pass
6.2.1	Penetration resistance (min. 1100N, zero Penetration)	
6.2.2	Electrical properties (100kΩ to 1000MΩ) i) Dry Antistatic ii) Wet Antistatic	491MΩ 243MΩ
6.2.3	Resistance to inimical environments (HI < 22°C)	Ok
6.2.4	Energy absorption of seat region (min 20J)	22.8 J
6.2.5	Water resistance (The total wetted area inside the footwear shall not be greater than 3cm ²)	No wet occurred
6.2.6	Metatarsal protection	NA
6.2.7	Ankle protection	NA
6.3	Upper	
6.3.1	Water penetration and water absorption (max. 0.2gm Penetration & max. 30% absorption)	0.13 17.9
6.3.2	Construction	Ok
6.3.3	Cut resistance	NA
6.4	Outsole	
6.4.1	Cleated area	Ok
6.4.2	Thickness of Cleated outsoles (>4mm & >6 mm)	8.8 mm
6.4.3	Cleat height (>2.5 mm)	4.6 mm
6.4.4	Resistance to hot contact (No melt seen at 150°C)	No Melt Seen

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7	Marking Each item of safety Footwear shall be and marked, for example by embossing or branding with the Following. a. Size b. Manufacturer's identification Mark c. Country of Origin d. Manufacturer's type Designation e. Year of Manufacture and at Least Quarter f. The Number and year of the European standard. g. The symbol(s) from table 14 appropriate to the protection provided or, where applicable the appropriate category (SB, S1.... S5) as described in table 16	7 -- India -- April 2015 EN ISO 20345-2011 S3 --
8	Information to be supplied	--

Remarks-Article meets the norms of EN 20345-2011


Checked By


Authorized Signatory

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