



# CERTIFICATE OF ACCREDITATION

*This is to attest that*

## **TUV SUD SOUTH ASIA PVT. LTD. AMBUR LABORATORY**

2<sup>ND</sup> FLOOR, AMBUR TRADE CENTRE M. C. ROAD, TIRUPATHUR DISTRICT  
AMBUR, TAMIL NADU, 635802, REPUBLIC OF INDIA

**Testing Laboratory TL-1081**

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Expiry Date March 1, 2026

Effective Date May 13, 2024



A handwritten signature in black ink, reading 'Raj Nathan'.

**President**

Visit [www.iasonline.org](http://www.iasonline.org) for current accreditation information.

# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

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## TUV SUD SOUTH ASIA PVT. LTD. AMBUR LABORATORY

[www.tuvsud.com](http://www.tuvsud.com)

**Contact Name** A Saleemraja

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*Accredited to ISO/IEC 17025:2017*

*Effective Date May 13, 2024*

<b>Mechanical</b>	
ASTM D1813	Standard Test Method For Measuring Thickness Of Leather Test Specimens
ASTM D2099	Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by The Maeser Water Penetration Tester
ASTM D2208	Standard Test Method For Breaking Strength Of Leather By The Grab Method
ASTM D2209	Standard Test Method For Tensile Strength Of Leather
ASTM D2211	Standard Test Method For Elongation Of Leather
ASTM D2212	Standard Test Method For Slit Tear Resistance Of Leather
ASTM D2240	Standard Test Method For Rubber Property – Durometer Hardness
ASTM D2941	Standard Test Method For Measuring Break Pattern Of Leather (Break Scale)
ASTM D4704	Standard Test Method For Tearing Strength, Tongue Tear Of Leather
ASTM D4705	Standard Test Method For Stitch Tear Strength Of Leather, Double Hole
ASTM D5963 Method A	Standard Test Method for Rubber Property – Abrasion Resistance (Rotary Drum Abrader)
ASTM D6182	Standard Test Method for Flexibility and Adhesion of Finish on Leather
ASTM F2232	Standard Test Method For Determining The Longitudinal Load Required To Detach High Heels From Footwear
BS EN 13515	Footwear – Test Methods for Uppers And Lining – Water Vapour Permeability and Absorption
DIN 12803	Footwear – Test Methods For Outsoles – Tensile Strength And Elongation
DIN EN 388 Section 6.4	Protective Gloves Against Mechanical Risks – Section 6.4 – Tear Resistance
DIN EN 12749	Footwear – Ageing Conditioning (Heat aging)
DIN EN 12773	Footwear – Test Methods For Outsoles – Needle Tear Strength
DIN EN ISO 21420 Section 6.3.1	Protective Gloves – General Requirements And Test Methods – Section 6.3.1 Test Methods For Determination Of Water Vapour Behaviors – Leather Materials

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DIN EN ISO 21420 Section 6.4	Protective Gloves – General Requirements And Test Methods – Section 6.4 Test Method For Determination Of Water Vapour Absorption Of Leather Materials
EN 12785	Footwear. Test Methods For Whole Shoe. Heel Attachment
ISO 34-1 Method A	Rubber, Vulcanized Or Thermoplastic – Determination Of Tear Strength – Part 1: Trouser, Angle And Crescent Test Pieces
ISO 37	Rubber, Vulcanized Or Thermoplastic – Determination Of Tensile Stress- Strain Properties
ISO 48-4	Rubber, Vulcanized Or Thermoplastic – Determination Of Hardness – Part 4: Indentation Hardness By Durometer Method (Shore Hardness)
ISO 868	Plastics And Ebonite – Determination Of Indentation Hardness By Means Of A Durometer (Shore Hardness)
ISO 2420	Leather – Physical And Mechanical Tests – Determination Of Apparent Density And Mass Per Unit Area
ISO 2589	Leather – Physical And Mechanical Tests – Determination Of Thickness
ISO 2781 (Method - A)	Rubber, Vulcanized Or Thermoplastic – Determination Of Density
ISO 3376	Leather – Physical And Mechanical Tests – Determination Of Tensile Strength And Percentage Elongation
ISO 3377-1	Leather – Physical And Mechanical Tests – Determination Of Tear Load – Part 1: Single Edge Tear
ISO 3377-2	Leather – Physical And Mechanical Tests – Determination Of Tear Load – Part 2: Double Edge Tear
ISO 3378	Leather – Physical And Mechanical Tests – Determination Of Resistance To Grain Cracking And Grain Crack Index
ISO 3379	Leather – Determination of Distension and Strength of Surface (Ball Burst Method)
ISO 4649 Method A	Rubber, Vulcanized or Thermoplastic – Determination of Abrasion Resistance Using a Rotating Cylindrical Drum Device
ISO 5402-1	Leather – Determination of Flex Resistance – Part 1: Flexometer Method
ISO 5403-1	Leather – Determination of Water Resistance of Flexible Leather – Part 1: Repeated Linear Compression (Penetrometer)
ISO 5403-2	ISO 5403-2:2011 Leather – Determination of Water Resistance of Flexible Leather – Part 2: Repeated Angular Compression (Maeser)
ISO 11644	Leather – Test For Adhesion Of Finish
ISO 14268	Leather – Physical and Mechanical Tests – Determination of Water Vapour Permeability
ISO 14268 Annex B	Leather – Physical and Mechanical Tests – Determination of Water Vapour Permeability – Annex B – Water vapour number
ISO 17227	Leather – Physical And Mechanical Tests – Determination Of Dry Heat Resistance Of Leather

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ISO 17228 Clause 6	Leather – Tests For Colour Fastness – Change In Colour With Accelerated Ageing
ISO 17229	Leather – Physical and Mechanical Tests – Determination of Water Vapour Absorption
ISO 17229 Annex A	Leather – Physical and Mechanical Tests – Determination of Water Vapour Absorption, Annex A – Water Vapour Number
ISO 17693	Footwear – Test Methods for Uppers – Resistance to Damage on Lasting
ISO 17694	Footwear – Test Methods for Uppers and Lining – Flex Resistance
ISO 17696	Footwear – Test Methods For Uppers, Linings And Insocks – Tear Strength
ISO 17697 Method A	Footwear – Test Methods For Uppers, Lining And Insocks – Needle Perforations
ISO 17697 Method B	Footwear – Test Methods For Uppers, Lining And Insocks – Seam Strength
ISO 17699	Footwear – Test Methods for Uppers and Lining – Water Vapour Permeability and Absorption
ISO 17700 Method D	Footwear – Test methods for upper components and insocks – Colour fastness to rubbing and bleeding – Method D colour fastness to bleeding-perspiration
ISO 17700 Method D	Footwear – Test methods for upper components and insocks – Colour fastness to rubbing and bleeding – Method D colour fastness to bleeding-water
ISO 17702	Footwear – Test Methods for Uppers – Water Resistance
ISO 17704	Footwear – Test Methods for Uppers, Linings and Insocks – Abrasion Resistance
ISO 17706	Footwear – Test Methods For Uppers – Tensile Strength And Elongation
ISO 17707	Footwear – Test Methods For Outsoles – Flex Resistance
ISO 17708	Test Methods For Whole Shoe – Upper Sole Adhesion
ISO 19074	Leather – Determination Of Water Absorption By Capillary Action (Wicking)
ISO 20344 Section 5.2	Personal Protective Equipment – Test Methods For Footwear – Section 5.2 – Determination Of Upper/Outsole And Sole Interlayer Bond Strength
ISO 20344 Section 6.3 (Leather)	Personal Protective Equipment – Test Methods For Footwear – Section 6.3 – Determination Of Tear Strength Of The Upper, Lining And / Or Tongue
ISO 20344 Section 6.4.2.1 (Leather Split & Polimeric) 6.4.2.2. (Rubber)	Personal Protective Equipment – Test Methods For Footwear – Section 6.4.2 Determination of Tensile Properties of the Upper Material
ISO 20344 Section 6.6	Personal Protective Equipment – Test Methods for Footwear – Section 6.6 - Determination of Water Vapour Permeability
ISO 20344 Section 6.7	Personal Protective Equipment – Test Methods for Footwear – Section 6.7 – Determination of Water Vapour Absorption
ISO 20344 Section 6.8	Personal Protective Equipment – Test Methods for Footwear - Section 6.8 – Determination of Water Vapour Coefficient

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ISO 20344 Section 6.12	Personal Protective Equipment – Test Methods for Footwear – Section 6.12 - Determination of Abrasion Resistance of Lining and Insock
ISO 20344 Section 6.13	Personal Protective Equipment – Test Methods for Footwear – Section 6.13 – Determination of Water Penetration and Water Absorption for Upper
ISO 20344 Section 7.3	Personal Protective Equipment – Test Methods For Footwear – Section 7.3 - Determination Of Abrasion Resistance Of Insole
ISO 20344 Section 8.3	Personal Protective Equipment – Test Methods For Footwear – Section 8.3 – Determination of Tear Strength of Outsole
ISO 20344 Section 8.4	Personal Protective Equipment – Test Methods for Footwear – Section 8.4 – Determination of Outsole Abrasion Resistance
ISO 20344 Section 8.6	Personal Protective Equipment – Test Methods For Footwear – Section 8.6 - Determination of Flexing resistance of outsole
ISO 20871	Footwear – Test Methods For Outsoles – Abrasion Resistance
ISO 20874	Footwear – Test Methods For Outsoles – Needle Tear Strength
ISO 22649 Method A	Footwear – Test Methods For Insoles And Insocks – Water Absorption And Desorption
ISO 22650	Footwear – Test Methods For Whole Shoe – Heel Attachment
ISO 22775 Method 2	Footwear – Test Methods For Accessories: Metallic Accessories – Corrosion Resistance
ISO 23910	Leather – Physical And Mechanical Tests – Measurement Of Stitch Tear Resistance
NF EN 12770	Footwear – Test Methods for Outsoles – Abrasion Resistance
NF EN 13520	Footwear – Test Methods for Uppers, Lining and Insocks – Abrasion Resistance
SATRA TM 1	Thickness Of Leather And Insole Materials
SATRA TM 2	Tensile Properties Of Insole Materials
SATRA TM 5	Stitch Tear Strength
SATRA TM 6 (Method 2)	Water Absorption And Desorption - Total Immersion Method
SATRA TM 11	Pin Holding Strength Of Insole Materials
SATRA TM 24	Lastometer Ball Burst Test
SATRA TM 29	Breaking Strength And Extension At Break
SATRA TM 30	Tear Strength – Trouser Leg Method
SATRA TM 31	Abrasion Resistance – Martindale Method
SATRA TM 33	Strength Perpendicular To Needle Perforations
SATRA TM 34	Resistance To Water Penetration – Maeser
SATRA TM 36	Break/Pipiness
SATRA TM 43	Tensile Strength And Extension At Break Of Leather

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SATRA TM 48	Determination Of Grain Crack Index For Sole Leathers
SATRA TM 55	Flexing Resistance of Upper Materials – Bally Flexometer
SATRA TM 65	Split Tear Strength
SATRA TM 68	Density Of Water Absorbent Cellular Materials
SATRA TM 77	Flexing Machine – Water Penetration Test
SATRA TM 80	Transverse Tensile Strength Of Sheet Materials
SATRA TM 92	Resistance Of Footwear To Flexing
SATRA TM 93	Abrasion Between Shoe Laces And Eyelets
SATRA TM 94	Breaking Force And Extension At Break Of Shoe Laces
SATRA TM 102	Measurement Of The Limit Of Useful Extension Of Elastics
SATRA TM 108	Strength Of Top-Piece Attachment
SATRA TM 113	Measurement Of The Strength Of Attachment Of Heels To Footwear And Backpart Rigidity Of Such Footwear
SATRA TM 117	Attachment Strength Of Decorative Bows
SATRA TM 118	Strength Of Sandal Toe Posts
SATRA TM 120	Strength Of Attachment Of Straps And Nails Of Stapled Uppers
SATRA TM 134	Density Of Materials By Volume Displacement
SATRA TM 137	Tensile Properties Of Plastics And Rubbers
SATRA TM 141	Breaking Force Of Buckles – Three Point Bending Test
SATRA TM 148	Resistance of Finish Films on Upper Leather to Peeling and Delamination
SATRA TM 149	Strength Of Eyelet Facings And Other Laced Fastenings
SATRA TM 150	Attachment Strength Of Eyelet
SATRA TM 151	Strength Of Fastened Buckles
SATRA TM 161	Bennewart Flex Test – Resistance To Cut Growth On Flexing
SATRA TM 162	Tear Strength – Baumann Method
SATRA TM 165	Tab Strength
SATRA TM 171	Resistance To Water Penetration – Penetrometer Test
SATRA TM 174	Abrasion Resistance – Rotating Drum Method
SATRA TM 175	Attachment Strength Of Shoe Lace Tags
SATRA TM 177	Resistance To Scuffing By Mild To And Fro Abrasion
SATRA TM 178	Water Vapour Absorption (Method 1)
SATRA TM 180	Measurement Of The Strength Of Stitched Seams In Upper And Lining Materials
SATRA TM 181	Strength Of Buckle And Strap Attachments

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SATRA TM 193	Abrasion Resistance of Leather
SATRA TM 195	Knot Slippage Test
SATRA TM 205	Hardness Of Rubber, Polyurethane And Plastics – Durometer Method (Shore A)
SATRA TM 218	Tear Strength Of Rubbers And Plastics – Trouser Method
SATRA TM 281	Peel Strength Of Bottom Construction In Complete Footwear
SATRA TM 305	Wick Test
SATRA TM 310 Method 2	Atmospheric Sulphide Tarnishing And Salt Water Corrosion
SATRA TM 404	Rapid Sole Adhesion Test – for Complete Footwear
SATRA TM 406	Lacquer Adhesion - Cross Hatch Test
SATRA TM 411	Peel Strength Of Footwear Sole Bonds
<b>Chemical</b>	
ASTM D5053	Standard Test Method for Colorfastness of Crocking of Leather
ISO 11640	Leather – Tests for colour fastness – Colour fastness to cycles of to-and-fro rubbing
ISO 11641	Leather – Tests for colour fastness – Colour fastness to perspiration
ISO 11642	Leather – Tests for colour fastness – Colour fastness to water
ISO 15700	Leather – Tests for colour fastness – Colour fastness to water spotting
ISO 15701	Leather – Tests for colour fastness – Colour fastness to migration into polymeric material
ISO 17700 (Method A)	Footwear – Test methods for upper components and insoles – Colour fastness to rubbing and bleeding – Method A to-and-fro square rubbing finger fastness testing machine
ISO 17700 (Method C)	Footwear – Test methods for upper components and insoles – Colour fastness to rubbing and bleeding – Method C to-and-fro circular rubbing finger fastness testing machine
ISO 17700 (Method D)	Footwear – Test methods for upper components and insoles – Colour fastness to rubbing and bleeding – Method D colour fastness to bleeding-perspiration
ISO 17700 (Method D)	Footwear – Test methods for upper components and insoles – Colour fastness to rubbing and bleeding – Method D colour fastness to bleeding-water
ISO 20433	Leather – Tests for colour fastness – Colour fastness to crocking
SATRA TM 167	Colour fastness to rubbing – crockmeter test
SATRA TM 173	Colour fastness to rubbing – reciprocating method
SATRA TM 185	Resistance to water spotting of leathers, textiles and coated fabrics
SATRA TM 335	Colour fastness to water or perspiration (petri-dish method)

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