

PRODUCT : Safety Shoe
REF. NO. : FS 62

DOC. NO.	03.05
ISSUE	01
REVISION	02
DATE	03/09/2010

As Per:
EN ISO 20344:2004
IS 15298:2002



TECHNICAL DATA SHEET

SL. No.	CLAUSE	DESCRIPTION	SPECIFICATION
1	DESIGN	<p>Construction</p> <p>Seat Region</p> <p>Height of Upper</p> <p>Thread</p> <p>Eyelet</p> <p>Laces</p>	<p>Specially Injection Moulded Construction for enhanced strength.</p> <p>Closed</p> <p>Less than 113 mm</p> <p>Nylon</p> <p>8 Nos; Camel type hook.</p> <p>Synthetic, 110 cm round, with breaking strength 55-60 kg.</p>
2	TOE PROTECTION	<p>General</p> <p>Construction</p> <p>Internal Length of Toe Cap</p> <p>Impact Resistance</p> <p>Compression Resistance</p> <p>Corrosion Resistance of Toe Caps</p>	<p>Toe-Caps are incorporated in such a way that they cannot be removed.</p> <p>Footwear is lined in the Toe Section.</p> <p>The lining at the edge of the toe caps extends to more than 5 mm beneath it, and more than 10 mm behind it.</p> <p>Made from high carbon steel and heat treated.</p> <p>Above 39 mm.</p> <p>When tested at an impact energy of 200 Joules, the clearance under the toe caps at impact is - Above 14.0 mm..</p> <p>When tested at a compression load of 15 kN, the clearance under the toe caps at impact is - Above 14.0 mm</p> <p>Exhibits less than 2.5 mm square area of corrosion under test conditions.</p>

3	LEATHER UPPER	<p>Construction</p> <p>Thickness</p> <p>Tear Strength</p> <p>Tensile Strength</p> <p>Water Vapour Permeability</p> <p>Water Vapour co-efficiency</p> <p>pH Value</p> <p>Chrome VI Content</p>	<p>Made from Buff Crazy Black + Cordura Blue</p> <p>1.8 mm-2.20 mm ± 0.2 mm</p> <p>Above 120 N.(For Leather)</p> <p>Above 15 N/mm²</p> <p>Above 0.8 mg/cm²/h</p> <p>Above 20.0 mg/cm sq.</p> <p>Above 3.5</p> <p>No harmful chrome content detected</p>
4	TONGUE	Tear Strength	Above 18 N.
5	VAMP LINING	<p>Tear Strength</p> <p>Abrasion Resistance</p> <p>Water Vapour Permeability</p> <p>Water Vapour co-efficiency</p>	<p>Above 15 N.</p> <p>The lining does not develop holes when exposed to 25,600 dry cycles, and 12,800 wet cycles</p> <p>Above 2.0 mg/cm²/h.</p> <p>Above 30 mg/cm²/h.</p>
6	SHOE LINING	<p>Construction</p> <p>Tear Strength</p> <p>Abrasion Resistance</p> <p>Water Vapour Permeability</p> <p>Water Vapour co-efficiency</p>	<p>Drylex Blue inner lining</p> <p>Above 15 N.</p> <p>The lining does not develop holes when exposed to 25,600 dry cycles, and 12,800 wet cycles</p> <p>Above 2.0 mg/cm²/h.</p> <p>Above 20 mg/cm²/h.</p>

7	INSOLE	<p>Construction</p> <p>Thickness</p> <p>Water Absorption/ Desorption</p> <p>Abrasion Resistance</p>	<p>Insole is incorporated in such a way that it can not be removed.</p> <p>2.0 mm.</p> <p>35 %.</p> <p>40%</p> <p>No damage to the insole when exposed to 400 cycles.</p>
8	INSOCK	<p>Material & Colour</p> <p>Thickness</p> <p>Abrasion Resistance</p>	<p>Soft Netlon Black on Moulded EVA</p> <p>Above 2 mm</p> <p>The lining does not develop holes when exposed to 25,600 dry cycles, and 12,800 wet cycles</p>
9	OUTSOLE	<p>Construction</p> <p>Colour</p> <p>Thickness</p> <p>Tear Strength</p> <p>Abrasion Resistance</p> <p>Flexing Resistance (30,000 cycles)</p> <p>Hydrolysis (150,000 cycles)</p> <p>Interlayer Bond Strength</p> <p>Resistance to Fuel Oil</p> <p>Cleated Outsole</p>	<p>Double Density TPU/PU</p> <p>Thermoplastic Polyurethane Grey Outsole And Black Polyurethane Midsole.</p> <p>Above 6 mm.</p> <p>More than 5 kN/m.</p> <p>Volume loss is less than 250 mm³.</p> <p>Cut growth is below 4 mm.</p> <p>Cut growth is below 6 mm.</p> <p>Above 4 N/mm & 3N/mm in case of sole tearing</p> <p>Below 12%.</p> <p>More than 45% of fore-part covered with cleats. More than 25% of heal portion is covered with Cleats.</p>
10	ANTISTATIC PROPERTY		<p>After conditioning in a dry and wet atmosphere, the electrical resistance is above 100 K ohms and below 1000 M ohms</p>
11	ENERGY ABSORPTION OF SEAT REGION		<p>Above 20 joules.</p>

12	ANTI SLIP PROPERTY		Co-efficient of friction is more than 0.28 for heel region & more than 0.32 for flat region
13	HEAT INSULATION OF SOLE COMPLEX		Below 22 ⁰ C. (The insulation cannot be damaged without damaging the footwear)
14	COLD INSULATION OF SOLE COMPLEX		Below 10 ⁰ C. (The insulation cannot be damaged without damaging the footwear)
15	HOT CONTACT (PU SOLE)		No damage to PU sole when exposed to a temperature of 150 ⁰ C