TECHNICAL DATA SHEET

PRODUCT : Safety Shoe
REF. NO. : FS 65

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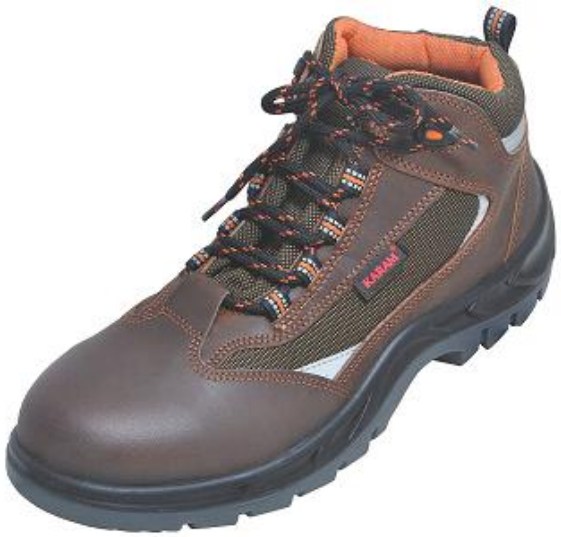

CONFORMING TO: EN ISO 20345:2011 & IS: 15298:2011
Protection Class: S1, P, CI, SRC

SL.No.	CLAUSE	DESCRIPTION	SPECIFICATION
1	DESIGN	CONSTRUCTION	Special Injection Molded Construction for enhanced strength.
		SEAT REGION	Closed
		HEIGHT OF UPPER	Less than 113 mm
		THREAD	Orange 6 Ply
		EYELET	Fancy Nylon tape
		LACES	Synthetic, 110 cm round, with breaking strength 55-60 kg
		WEIGHT	Approx. 1.30 Kg /Pair (Size 8)
2	TOE PROTECTION	GENERAL	• Toe-Caps are incorporated in such a way that they cannot be removed. • Footwear is lined in the Toe Section. • The lining at the edge of the toe caps extends to more than 5 mm beneath it, and more than 10 mm behind it.
		CONSTRUCTION	Made from high carbon steel

		INTERNAL LENGTH OF TOE CAP	Above 39 mm.
		IMPACT RESISTANCE	When tested at an impact energy of 200 Joules, the clearance under the toe caps at impact is Above 14.0 mm.
		COMPRESSION RESISTANCE	When tested at a compression load of 15 kN, the clearance under the toe caps at impact is Above 14.0 mm
		CORROSION RESISTANCE	Exhibits less than 2.5 mm square area of Corrosion under test conditions.

3	SOLE PROTECTION (PENETRATION RESISTANCE)	GENERAL	The penetration resistant (steel plate 0.8 mm thick) insert shall be such that the maximum distance between the line represented by the feather edge of the last and edge of the insert is 6.5 mm. In the heel region the maximum distance between the line represented by the feather edge of the last and the insert shall be 17 mm.
		CONSTRUCTION	Made from High Carbon Steel
		PENETRATION RESISTANCE	Steel Nail should not penetrate at minimum force 1100 N
		CORROSION RESISTANCE	Exhibits no more than five areas of corrosion, none of which exceed 2.5 sq.mm in area.
		FLEX RESISTANCE OF PENETRATION RESISTANCE INSERTS	No Sign of cracking after 1,00,000 flex
4	LEATHER UPPER	CONSTRUCTION	Made from Buff Crazy Horse Dark Brown + Cordura Brown Insert
		THICKNESS	2.00 mm ± 0.2 mm
		TEAR STRENGTH	Above 120 N.
		TENSILE STRENGTH	Above 15 $N/mm^{2.}$
		WATER VAPOR PERMEABILITY	Above 0.8 $mg/cm^2/h$
		WATER VAPOR CO-EFFICIENCY	Above 20.0 mg/cm sq.
		CHROME VI CONTENT	No harmful chrome content detected
5	TONGUE	TEAR STRENGTH	Above 36 N
6	VAMP LINING	TEAR STRENGTH	Above 15 N.
		MARTINDALE ABRASION RESISTANCE	The lining does not develop holes when exposed to 25,600 dry cycles, and 12,800 wet cycles
		WATER VAPOR PERMEABILITY	Above 2.0 $mg/cm^2/h$.
		WATER VAPOR CO-EFFICIENCY	Above 30 $mg/cm^2/h$.
7	SHOE LINING	CONSTRUCTION	Soft Drylex Orange
		TEAR STRENGTH	Above 15 N.
		MARTINDALE ABRASION RESISTANCE	The lining does not develop holes when exposed to 25,600 dry cycles, and 12,800 wet cycles
		WATER VAPOR PERMEABILITY	Above 2.0 $mg/cm^2/h$.
		WATER VAPOR CO-EFFICIENCY	Above 20 $mg/cm^2/h$.

8	INSOLE	CONSTRUCTION	Insole is incorporated in such a way that it cannot be removed.
		THICKNESS	2.0 mm.
		WATER ABSORPTION	Above 35 %.
		WATER DESORPTION	Above 40%
		ABRASION RESISTANCE	No damage to the insole when exposed to 400 cycles.
9	INSOCK	MATERIAL & COLOUR	Molded Black
		THICKNESS	Above 2 mm
		ABRASION RESISTANCE	The lining does not develop holes when exposed to 25,600 dry cycles, and 12,800 wet cycles
10	OUTSOLE	CONSTRUCTION	Single Density Polyurethane
		COLOUR	Black
		THICKNESS	Above 6 mm.
		TEAR STRENGTH	More than 8 kN/m.
		ABRASION RESISTANCE	Volume loss is below 150 mm^3
		FLEXING RESISTANCE (30,000 CYCLES)	Cut growth is below 4 mm.
		HYDROLYSIS (150,000 CYCLES)	Cut growth is below 6 mm.
		INTERLAYER BOND STRENGTH	Above 4 N/mm & 3N/mm in case of leather tearing
		UPPER OUTSOLE BOND STRENGTH	Above 4 N/mm & 3N/mm in case of Leather tearing
		RESISTANCE TO FUEL OIL	Below 12%.
		CLEATED OUTSOLE	More than 45% of fore-part covered with cleats.

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11	ANTISTATIC PROPERTY		After conditioning in a dry and wet atmosphere, the electrical resistance is above 100 K ohms and below 1000 M ohms
12	ENERGY ABSORPTION OF SEAT REGION		Above 20 joules.
13	ANTI SLIP PROPERTY		Co-efficient of friction is more than 0.40 for heel region and forepart region.
14	HEAT INSULATION OF SOLE COMPLEX		Below 22^0 C. (The insulation cannot be damaged without damaging the footwear)
15	COLD INSULATION OF SOLE COMPLEX		Below 10^0 C. (The insulation cannot be damaged without damaging the footwear)
16	HOT CONTACT (PU SOLE)		No damage to PU sole when exposed to a temperature of 150^0 C for 1 minute.

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