

4.3 Decorative Trim – Refer page 30 for details.

Small round outer diameter – 10 mm \pm 2 mm – **colour silver**

Small round inner diameter – 6.5 mm \pm 2 mm

Small round thickness – 9 mm \pm 2 mm

Big round outer diameter – 30 mm \pm 2 mm – **colour camel/beige**

Big round inner diameter – 15 mm \pm 2 mm

Big round thickness – 6 mm \pm 2 mm

4.4 Pipe – PVC of thickness 0.25 mm of diameter 8mm \pm 2mm. – **transparent****4.5 Strap attachment strength** – The Strap attachment strength shall not be less than 250 N.**4.6 Insole** – PVC coated fabric thickness min. 1.2 mm with printing as per the photograph attached.**4.7 Sole**

- Direct Moulded PU Sole colour black of shelf life min. 12 months.
- The tread design will depend on the mould and it will not be a binding to follow one pattern. Different parties may supply chappal with different tread patterns as per their moulds. However, requirements have to be met.

4.8 Soling Pattern

- The soling shall not include continuous lateral tread patterns or any other features, such as sharp corners at the base of the sole pattern, which may accelerate or cause premature crack formation.
- The design should be such that the sole will have adequate skid resistance with cleat height of min. 0.5 mm.

4.9 Thickness of sole

- The sole thickness at forepart shall be 12 mm \pm 2 mm
- The heel height shall be 25 mm \pm 2 mm

4.10 Sole Hardness - Hardness shall be 60 \pm 5 Shore A.**4.11 Electrical Insulation of sole** – 100 k oms to 1000 m oms**4.12 Relative Density of Soling Material**

The relative density of the material after moulding shall be 0.42 gm per cc min.

4.13 Abrasion Resistance of Sole

When tested as per specification IS 15298 the maximum volume loss shall not be more than 150 mm³.

4.14 Sole Flexing

When tested as per IS: 15298 the sole should withstand 75,000 cycles of flexing at 90° angle with maximum cut growth of 400% (Ross flexing).

- 4.15. Hydrolysis (Sole)** – The Chappal shall be placed in High Humidity (100%) at a temperature of 70° C for 5 days and then tested for sole flexing for 50,000 cycles. The Crack should not be more than 600%.

4.16 Chemical Tests

The sample should be tested for the following critical chemical substances which are potentially present in footwear and footwear components and can have an adverse effect on the wearer and environmental impact due to its chemical reactivity. These critical substances can be carcinogenic, allergenic and have harmful effect on human health.

(a) Lead Content

The lead content (as Pb) shall not be more than 2 ppm when determined in accordance with the method prescribed in IS 12240 (Part 5): 1988/ DIN EN 1122:2002.

(b) Cadmium

The Cadmium content should not be more than 0.005% when tested as per DIN EN 1122:2002.

(c) Phthalates

The phthalates content in the sample when tested as per ISO 18856 should not be more than 0.05%.

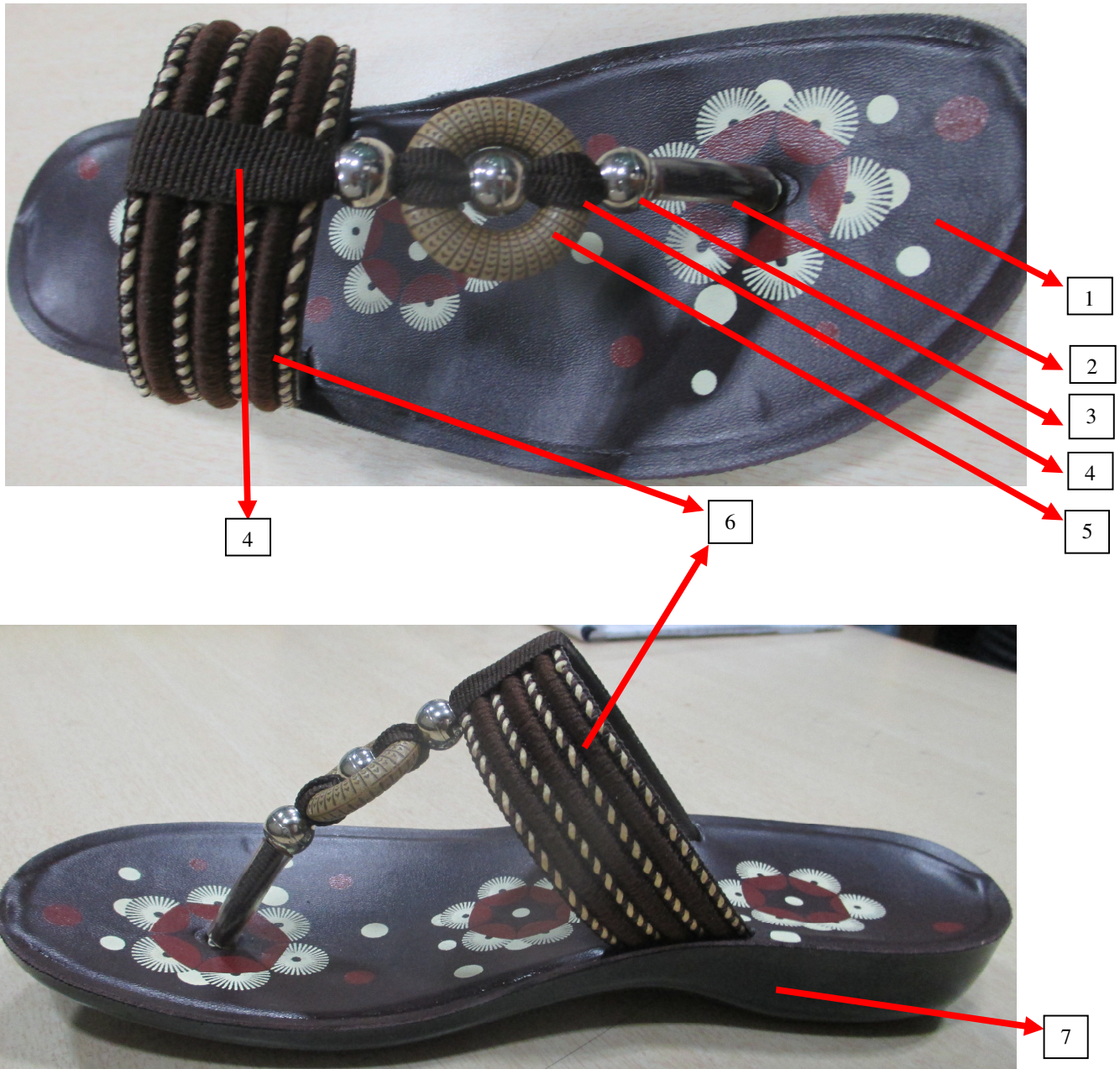
(d) Organotin compounds

The organotin compounds in the sample should be tested as per ISO 17353:2004. The limiting value for tributyl tin (TBT) is 0.025 mg/kg, for di-butyl tin (DBT) is 1 mg/kg and for mono butyl tin (MBT) is 1 mg/kg.

5. SAMPLING AND CRITERIA FOR CONFORMITY

- 5.1** The method of sampling, drawing representative samples of the chappal and the criteria for conformity shall be as prescribed in IS 6368 : 1971.
- 5.2** The predespatch inspection and sealing of lots will be done by the agency authorised by Managing Director, Chhattisgarh State Minor Forest Produce (Trading & Development) Co-operative Federation Limited at the manufacturing unit only at the expense of purchaser only.
- 5.3** The supplier will have to give nine months guarantee for the life of Chappal from the date of receipt of chappal by the consignee. In case of department. He will have to supply the new chappal in place of the chappal supplied earlier.

6. PHOTOGRAPH WITH DETAILS –



Sl.No.	Part name	Material
1	Socks/ Footbed cover	PVC coated fabric
2	Transparent tube	PVC
3 & 5	Plastic material for decorating (3small and 1 big round)	Polystyrene
4	Webbing	Polyester
6	Other fabric material	Polyester
7	Sole	Polyurethane (PU)

Both the above photos are for reference only