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Indian Standard

SPECIFICATION FOR *BINDI* (LIQUID)

UDC 665·584·286 (BINDI)

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
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0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 10 September 1984, after the draft finalized by the Cosmetics Sectional Committee had been approved by the Petroleum, Coal and Related Products Division Council.

0.2 Liquid *BINDI*, a traditional cosmetic used by ladies of all age groups in India, consists of homogeneous suspension of pigment in emulsion or suspension medium. It is applied with an applicator.

0.3 No stipulations have been made in this standard regarding the composition of liquid *BINDI*. However, it is necessary that the raw materials used are such that in the concentrations in which they would be present in the finished *BINDI*, after interaction with other raw materials used in the formulation, they are free from any harmful effects. For determining the dermatological safety of a new formulation, or of a new raw material used in an old formulation, the methods prescribed in IS : 4011-1982* for prophetic testing shall be followed. It shall be the responsibility of the manufacturers to satisfy themselves of the dermatological safety of their formulation according to that standard before releasing it for sale.

0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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1. SCOPE

1.1 This standard prescribes the requirements and methods of sampling and test for liquid *BINDI*.

2. REQUIREMENTS

2.1 Description — The liquid *BINDI* shall be homogeneous. It shall have an attractive appearance and shall not leave any stain on the skin after washing with water. It shall have a pleasant agreeable odour.

*Methods for dermatological tests for cosmetics (*first revision*).
†Rules for rounding off numerical values (*revised*).

2.2 Ingredients — Unless specified otherwise, all the raw materials used in the manufacture of liquid *BINDI* shall conform to the requirements prescribed in the relevant Indian Standards, where such standards exist.

2.2.1 *Dyes Colours and Pigments* — The dyes, colours and pigments used in the manufacture of liquid *BINDI* shall comply with the provisions of IS : 4707 (Part 1) - 1968* subject to the provisions of Schedule Q of the *Drugs and Cosmetics Act and Rules*, issued by the Government of India, as amended from time to time.

2.2.2 *Other Ingredients* — Ingredients other than dyes, colours and pigments shall comply with the provisions of IS : 4707 (Part 2) - 1973†.

2.3 The liquid *BINDI* shall also comply with the requirements given in Table 1 when tested according to methods prescribed in Appendix A. Reference to relevant clauses of Appendix A is given in col 4 of the table.

TABLE 1 REQUIREMENTS FOR LIQUID *BINDI*

SL NO.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST
(1)	(2)	(3)	(4)
i)	Total solids, percent by mass, *Min*	5	A-2
ii)	Drying time in minutes, *Max*	5	A-3
iii)	Viscosity in seconds	100 to 200	A-4
iv)	Stability at 45°C	To pass the test	A-5
v)	*p*H	6·0 to 8·5	A-6

3. PACKING AND MARKING

3.1 Packing — Liquid *BINDI* shall be packed in a metallic, plastic or any other suitable air-tight container. The cap shall carry an applicator of suitable shape and size.

3.2 Marking — Each container shall bear a label marked with the following information:

a) Manufacturer's name and/or his recognized trade-mark, if any;
b) Shade number or shade name;
c) Batch number, in code or otherwise, to enable the lot of manufacture to be traced back from records; and
d) Net mass/volume of contents in container and the year of manufacture.

*Classification of cosmetic raw materials and adjuncts, Part 1.
†Classification of cosmetic raw materials and adjuncts, Part 2.

3.2.1 The container may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

4. SAMPLING

4.1 Representative samples of the material shall be drawn as prescribed in IS : 3958-1966*.

4.2 Tests for all characteristics shall be carried out on the composite sample.

4.3 The material shall be taken as conforming to the specification if the composite sample passes all the tests.

APPENDIX A

(*Clause* 2.3)

METHODS OF TEST FOR LIQUID *BINDI*

A-1. QUALITY OF REAGENTS

A-1.1 Unless specified otherwise, pure chemicals and distilled water (*see* IS : 1070-1977†) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

A-2. DETERMINATION OF TOTAL SOLIDS

A-2.1 Procedure — Take about 2 g of the material, accurately weighed, in a tared porcelain basin of 7·5 cm diameter and evaporate to near dryness on water-bath. Then remove the basin to an air-oven maintained at 105 ± 2°C. Cool in a desiccator and weigh. Repeat the operation till constant mass is obtained.

*Methods of sampling cosmetics and toilet goods.

†Specification for water for general laboratory use (*second revision*).

A-2.2 Calculation

$$\text{Total solids, percent by mass} = \frac{100\ M_2}{M_1}$$

where

M_2 = mass in g of the residue, and

M_1 = mass in g of the material taken for the test.

A-3. DETERMINATION OF DRYING TIME

A-3.1 Wash hands with soap and water and allow the hands to dry completely. Take a little liquid *BINDI* with applicator, from the container and apply on the back of hand just below the thumb inside the palm in the same normal way of applying *BINDI* on the forehead. Start the stop watch, Note the time of drying in minutes, when the *BINDI* has completely dried.

A-4. DETERMINATION OF VISCOSITY

A-4.0 Outline of the Method — The viscosity is determined at 27 ± 1°C in Ford cup viscometer No. 4.

A-4.1 Apparatus — Ford cup viscometer No. 4.

NOTE — The flow cup shall be essentially of the form and dimensions as shown in Fig. 1.

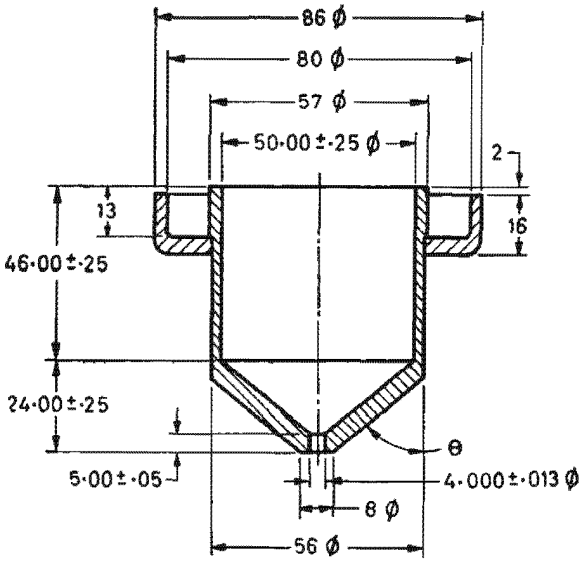

FIG. 1 FLOW CUP

A-4.2 Material of Construction — A cup made of any non-ferrous material is suitable. This may be plated. The finish shall be smooth.

A-4.3 The jet may be either bored directly or constructed separately of stainless steel and force fitted. Care is essential in order to avoid damage to the lower apex of the cup. A protective skirt which does not interfere with the flow may be provided.

A-4.4 The following apparatus shall be used in carrying out a test :

a) A thermometer accurate to within 0·5°C;

b) A stop-watch or stop-clock;

c) A suitable stand, provided with levelling screws;

d) A spirit level; and

e) A straight-edged scraper for the top of the cup.

A-4.5 Procedure — Place the flow cup on the stand in a place free from draught, preferably with the air temperature within the range 27° ± 2°C. Level by the use of a spirit level placed on the rim.

A-4.5.1 With the orifice closed by the finger, fill the cup with the bubble-free sample until it just begins to overflow into the gallery, pouring slowly to minimize the formation of air bubbles. If bubbles are present, allow them to rise and then remove them from the surface.

A-4.5.2 Check that the temperature of the material in the cup is within 1°C of the test temperature, the cup may beat a temperature different from that of the sample and it is recommended that a minute or so be allowed to elapse before checking the temperature.

A-4.5.3 Place the scraper on the rim of the cup and draw it firmly across until the excess of the sample has flowed into the gallery. Place the receiver under the cup. Remove the finger and simultaneously start the stop-watch, watch the stream of liquid flowing from the orifice. At the first evidence of a break of the stream into droplets, stop the stop-watch. The time taken is recorded in seconds as time of flow in flow cup. Take average of two readings. This average time gives viscosity in seconds.

A-5. TEST FOR STABILITY

A-5.1 Procedure — Take 10 ml of the material in a test tube properly closed and keep it in an incubator maintained at a temperature of 45 ± 2°C for 24 hours.

A-5.2 The material shall be taken to have passed the test if there is no appreciable separation or sedimentation of the solid contents.

A-6. DETERMINATION OF *p*H

A-6.1 Apparatus

A-6.1.1 *p*H *meter* — Provided with glass and calomel electrodes.

A-6.2 Procedure — Take 50 ml of the sample and determine its *p*H at 27°C using the *p*H meter.