IS 11142 (1984): Henna Powder [PCD 19: Cosmetics]

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Indian Standard

SPECIFICATION FOR HENNA POWDER

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Indian Standard

SPECIFICATION FOR HENNA POWDER

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Indian Standard

SPECIFICATION FOR HENNA POWDER

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 12 December 1984, after the draft finalized by the Cosmetics Sectional Committee had been approved by the Petroleum, Coal and Related Products Division Council.

0.2 Henna (called *MEHNDI* in Hindi) is the leaf of a small shrub. Botanically the plant is known as *Lawsonia inermis* Linn. syn. L. *alba*, fam. Lythraceae. The leaves of the plant, dried and powdered, are used to dye the hair and for colouring the finger nails, palms and soles of the feet. It is also exported in considerable quantities.

0.3 Henna powder quality is determined by its colour, purity, its dyeing property and fineness. The principal colouring matter is lawsone.

0.4 At times henna powder may be adulterated with sand, stems, fruit of henna plant, husk of paddy, leaves and twigs of other shrubs, etc. Certain requirements and tests, as in case of powdered spices have been included to restrict malpractices.

0.5 Microscopic examination of the powdered henna leaves show the following histological structures. Olive green or brownish green numerous fragments of cuticle and leaf *parenchyma rosette* aggregates and monoclinic prisms of calcium oxalate frequently up to 15 microns and occasionally up to 40 microns in diameter, globular mucilage cells, numerous fragments of intra-vascular tissues, long narrow and shorter fusi form *schlerenchyma* fibres with thick walls, some of the latter being wavy toothed, fragments of epidermis with stomata and striated cuticle, the stomata being surrounded by ordinary epidermal cells; occasional papillae or non-glandular hair fragments.

0.6 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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*Rules for rounding off numerical values (*revised*).

1. SCOPE

1.1 This standard prescribes the requirements, sampling procedure and methods of test for henna powder.

2. REQUIREMENTS

2.1 Description — The material shall be in the form of fine dried powder obtained from fresh leaves of henna plant. A minimum of 95 percent should pass through 250 micron IS sieve [*see* IS : 460 (Part 1)-1978*]. It shall be free from extraneous adulterants (*see* **0.3**).

2.2 The materials shall also comply with the requirements given in Table 1.

TABLE 1 REQUIREMENTS FOR HENNA POWDER

Sl No.	Characteristic	Requirement	Method of Test Ref to Cl No. in IS : 7159-1984*
(1)	(2)	(3)	(4)
i)	Moisture and volatile matter, percent by mass, *Max*	10	4
ii)	Cold water extract, percent by mass	25 to 32	5
iii)	Crude fibre, percent by mass	10 to 15	6
iv)	Mineral matter, percent by mass	8 to 12	7
v)	Acid insoluble ash, percent by mass	3 to 6	8
vi)	Extraneous sand, percent by mass, *Max*	5	9
vii)	Presence of extraneous dyes	To pass the test	10
viii)	Lawsone pigment, percent by mass, *Min*	1·0	11

Note — Total vegetable matter; percent by mass shall be approximately 95 percent.

Total vegetable matter = 100 − (sand, percent by mass)

*Methods of test for henna powder (*first revision*).

*Specification for test sieves: Part 1 Wire cloth test sieves (*second revision*).

3. PACKING AND MARKING

3.1 Packing

3.1.1 The material shall be packed in polythene lined hessian bags or in suitable containers as agreed to between the purchaser and the supplier.

3.1.2 All containers in which the material is packed shall be dry, clean and tight so that extraneous impurities are not introduced.

3.2 Marking

3.2.1 The material shall be supplied in accordance with the marking and delivery instructions given by the purchaser.

3.2.2 Each container shall be marked with the following information:

a) Name of the material;

b) Manufacturer's name or his trade-mark, if any;

c) Gross, net and tare mass; and

d) Date of packing.

3.2.3 The containers may also be marked with the Standard Mark.

3.2.4 The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

4. SAMPLING OF HENNA POWDER

4.1 General Requirements

4.1.0 In drawing, preparing, storing and handling test samples the following precautions and directions shall be observed.

4.1.1 Samples shall not be taken in an exposed place.

4.1.2 The sampling instrument shall be clean and dry.

4.1.3 Precautions shall be taken to protect the samples, the material being sampled, the sampling instrument, the containers for samples, from adventitious contamination.

4.1.4 To draw a representative sample, the contents of each container selected for sampling shall be mixed as thoroughly as possible by suitable means.

4.1.5 The sample containers shall be placed in clean dry, air-tight glass or other suitable containers.

4.1.6 The sample containers shall be of such a size that they are almost completely filled by the sample.

4.1.7 Each sample container shall be sealed air-tight with a suitable stopper after filling, and marked with full details of sampling, the date of sampling and the year of manufacture of the material.

4.2 Scale of Sampling

4.2.1 Lot — All the containers in a single consignment of the material drawn from a single batch of manufacture shall constitute a lot. If a consignment is declared to consist of different batches of manufacture, the batches shall be marked separately and the group of containers in each batch shall constitute separate lots.

4.2.1.1 Samples shall be tested from each lot for ascertaining conformity of the material to the requirements of the specification.

4.2.2 The number of containers (n) to be chosen from the lot shall depend on the size of the lot (N) and shall be in accordance with col 1 and 2 of Table 2.

TABLE 2 NUMBER OF CONTAINERS TO BE SELECTED FOR SAMPLING

Lot Size N	Number of Containers to be Selected n
(1)	(2)
1 and 2	Each container
3 to 50	3
51 to 200	4
201 to 400	5
401 to 650	6
651 to 1 000	7

4.2.3 The containers to be selected for sampling shall be chosen at random from the lot and for this purpose random number tables (*see* IS : 4905-1968*) shall be used; in case such tables are not available, the following procedure shall be adopted:

Starting from any container, count them as 1, 2, 3....., etc, upto r and so on in a systematic manner, where r is the integral part of N/n. Every r th container thus counted shall be withdrawn from the lot.

*Methods for random sampling.

4.3 Test Samples and Referee Sample

4.3.1 *Preparation of Test Samples* — Draw with an appropriate sampling instrument a small portion of the material from different parts of each container selected (*see* Table 2). The total quantity of the material drawn from each container shall be sufficient to conduct the tests for all the characteristics given under **2** and shall be not less than 0·5 kg.

4.3.1.1 Thoroughly mix all portions of the material drawn from the same container. Equal quantity of the thoroughly mixed material taken from each of the selected containers shall be well mixed together so as to form a composite sample weighing not less than 0·5 kg. This composite sample shall be divided into three equal parts, one for the purchaser, another for the supplier and the third for the referee.

4.3.2 Tests for all the requirements given in **2** shall be conducted on the composite sample.

4.3.3 *Referee Sample* — The referee sample shall consist of the composite sample marked for this purpose and shall bear the seals of the purchaser and the supplier. It shall be kept at a place agreed to between the purchaser and the supplier and shall be used in case of dispute between the two.

5. CRITERIA FOR CONFORMITY

5.1 A lot shall be declared as conforming to this specification if the composite sample satisfies all the requirements (*see* **2**).

6. TEST METHODS

6.1 Tests shall be carried out as prescribed in IS : 7159-1984 .

*Methods of test for henna powder (*first revision*).

(*Continued from page* 2)

Ad-hoc Panel for Henna Powder, PCDC 19 : 1 : 2

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AMENDMENT NO. 1 JULY 1998
TO
IS 11142 : 1984 SPECIFICATION FOR HENNA POWDER

[*Page* 5, *clause* **3.2.2**(d)] — Insert '(e)' after '(d)':

'e) Best use before ..... (Month and year to be declared by the manufacturer)'.

(PCD 19)

Reprography Unit, BIS, New Delhi, India

AMENDMENT NO. 2 MARCH 2001
TO
IS 11142 :1984 SPECIFICATION FOR *HENNA* POWDER

[*Page* 5, *clause* **3.2.2**(e) *and Amendment No.* 1] — Substitute the following for the existing:

'e) Best use before.....(Month and year to be declared by the manufacturer).

NOTE — This is exempted in case of pack sizes of 10 g or less and if the shelf life of the product is more than 24 months.'

(*Page* 5, *clause* **3.2.2**) — Insert (f) after (e):

'f) List of key ingredients.

NOTE — This is exempted in case of pack sizes of 30 g or less.'

(PCD 19)

Reprography Unit, BIS, New Delhi, India