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“जानने का अधिकार, जीने का अधिकार”
Mazdoor Kisan Shakti Sangathan
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”
Jawaharlal Nehru
“Step Out From the Old to the New”

IS 9339 (1988): Pomades and Brilliantines [PCD 19: Cosmetics]
Indian Standard

SPECIFICATION FOR
POMADES AND BRILLIANTINES

( First Revision )

First Reprint SEPTEMBER 1995

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

Gr 3  April 1989
AMENDMENT NO. 2 AUGUST 1998
TO
IS 9339 : 1988 SPECIFICATION FOR POMADES
AND BRILLIANTINES
(First Revision)

[Page 3, clause 4.2(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. 3 OCTOBER 1998
TO
IS 9339: 1988 SPECIFICATION FOR
POMADES AND BRILLIANTINES
(First Revision)

(Page 1, Foreword, clause 0.3) — Insert the following clause after 0.3 and renumber the subsequent clauses accordingly:

‘0.4 A scheme for labelling environment friendly products known as ECO Mark has been introduced at the instance of the Ministry of Environment and Forests (MEF), Government of India. The ECO Mark is being administered by the Bureau of Indian Standards Act, 1986 as per the Resolution No. 71 dated 21 February 1991 and No. 768 dated 24 August 1992, published in the Gazette of the Government of India. For a product to be eligible for marking with ECO logo, it shall also carry the Standard Mark of BIS besides meeting additional environment friendly requirements. For this purpose, the Standard Mark of BIS would be a single mark being a combination of the BIS monogram [ISI] and the ECO logo. Requirements for ECO friendliness will be additional, manufacturing units will be free to opt for Standard Mark alone also.

This amendment is based on the Gazette Notification No. 170 dated 18 May 1996 for pomades and brilliantines as environment friendly products published in the Gazette of the Government of India. This amendment is, therefore, being issued to this standard to include environment friendly requirements for pomades and brilliantines.’

(Page 2, clause 3.3) — Insert the following clauses after 3.3:

3.4 Additional Requirement for ECO Mark

3.4.1 General Requirements

3.4.1.1 The product shall conform to the requirements for quality, safety and performance prescribed under 3.1 to 3.3.

3.4.1.2 All the ingredients that go into formulation of cosmetics shall comply with the provisions of IS 4707 (Part 1): 1988 ‘Classification of cosmetic raw materials and adjuncts: Part 1 Dyes, colours and pigments (first revision)’ and IS 4707 (Part 2): 1993 ‘Classification of cosmetic raw materials and adjuncts: Part 2 List of raw materials generally not recognized as safe (first revision)’.
Amend No. 3 to IS 9339 : 1988

The product shall also meet specific requirements as given in the standard.

3.4.1.3 The product package shall display a list of ingredients in descending order of quantity present.

3.4.1.4 The product shall not be manufactured from any carcinogenic ingredients.

3.4.1.5 The manufacturer shall produce to BIS the environmental consent clearance from the concerned State Pollution Control Board as per the provisions of the Water (Prevention and Control of Pollution) Cess Act, 1977 and the Air (Prevention and Control of Pollution) Act, 1981 along with the authorization, if required under the Environment (Protection) Act, 1986 and the Rules made thereunder, while applying for ECO Mark. Additionally, provisions of the Drugs and Cosmetics Act, 1940 and the Rules thereunder shall also be complied with.

3.4.2 Specific Requirements

3.4.2.1 Product shall be dermatologically safe when tested as prescribed in IS 4011:1997 ‘Methods of test for safety evaluation of cosmetics (second revision)’.

3.4.2.2 Heavy metals calculated as lead (Pb) and arsenic (As2O3) shall not exceed 20 and 2 ppm, respectively when tested by the respective method prescribed in Indian Standards.

(Page 2, clause 4.1) — Insert the following clause after 4.1 and renumber the subsequent clauses:

‘4.2 The material for product packaging shall meet the parameters involved under the scheme of labelling environment friendly packaging/packaging materials.’

[Page 3, clause 4.2.1 (renumbered 4.3.1) — Insert the following clause after 4.2.1:

‘4.4 The product package shall be suitably marked that ECO Mark label is applicable only to the contents, if the product package is not separately covered under the ECO Mark scheme.’

(PCD 19)
AMENDMENT NO. 4 APRIL 2001
TO
IS 9339 : 1988 SPECIFICATION FOR POMADES AND
BRILLIANTINES
( First Revision )

[ Page 3, clause 4.2(e) and Amendment No. 2 ] — 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/25 ml or less and if the shelf life of the product is more than 24 months.'

( Page 3, clause 4.2 ) — Insert (f) after (e):

f) List of key ingredients.

NOTE — This is exempted in case of pack sizes of 30 g/60 ml or less.

( PCD 19 )
AMENDMENT NO. 1 JANUARY 1998
TO
IS 9339 : 1988 SPECIFICATION FOR

AMENDMENT NO. 2 AUGUST 1998
TO
IS 9339 : 1988 SPECIFICATION FOR POMADES
AND BRILLIANTINES

( First Revision )

[ Page 3, clause 4.2(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. 1 JANUARY 1998
TO
IS 9339 : 1988 SPECIFICATION FOR
POMADES AND BRILLIANTINES
(First Revision)

[Page 2, Table 1, Sl No. (vii)]—Substitute the following for the existing:

vii) Peroxide value mg/l 1000 g, Max 10 B-8

(Page 6, clause B-8)—Substitute the following for the existing matter:

B-8 TEST FOR PEROXIDE VALUE

B-8.1 Reagents

B-8.1.1 Glacial Acetic Acid

B-8.1.2 Chloroform

B-8.1.3 Potassium Iodide Solution — saturated, freshly prepared.

B-8.1.4 Standard Sodium Thiosulphate Solution — 0.01 N, freshly standardized.

B-8.1.5 Starch Indicator Solution

Triturate 5 g of starch and 0.01 g of mercuric iodide with 30 ml of cold water and slowly pour it with stirring into one litre of boiling water. Boil for three minutes. Allow to cool and decant off the supernatant clear liquid.

B-8.2 Procedure

Weigh accurately about 5 g of the material in a 250-ml glass stoppered conical flask and dissolve by shaking in 30 ml of a mixed solvent containing 3 parts by volume of glacial acetic acid and 2 parts by volume of chloroform. Add 0.5 ml of saturated potassium iodide minute with occasional shaking, then add 30 ml of water and titrate with standard sodium thiosulphate solution. Add the thiosulphate solution until the colour of the titrated solution becomes light yellow. Then add 1 ml of starch indicator solution and continue the titration till the disappearance of the blue colour. Carry out a blank determination without using the sample.
Amend No. 1 to IS 9339:1988

B-8.3 Calculation

\[
\text{Peroxide value milli-equivalents/1000 g} = \frac{1000(V_1 - V_2)N}{M}
\]

where

\( V_1 \) = volume in ml of standard sodium thiosulphate solution required with the sample;

\( V_2 \) = volume in ml of standard sodium thiosulphate solution required with the blank;

\( N \) = normality of standard sodium thiosulphate solution; and

\( M \) = mass in g of the sample taken for the test.

(PCD 19)
Indian Standard

SPECIFICATION FOR
POMADES AND BRILLIANTINES
(First Revision)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards on 7 Sept 1988, after the draft finalized by the Cosmetics Sectional Committee had been approved by the Petroleum, Coal and Related Products Division Council.

0.2 This standard was first published in 1979 and covered requirements pertaining to pomades and solid brilliantines as well as liquid brilliantines. The Committee responsible for the formulation of this standard observed that till date, there is not even a single manufacturer of liquid brilliantines in the country nor is there any possibility in near future also as there is no demand for liquid type of brilliantines in the Indian market. Hence, reference to liquid brilliantines is being deleted in this revision. Further, it was felt that relative density is though an important requirement to check the purity of white petroleum jelly which is a base material for pomades and brilliantines but is not a critical requirement for finished pomades and brilliantines and is, therefore, being deleted in this revision. Other changes as necessary have also been contemplated.

0.3 This standard covers pomades and brilliantines for general use. It does not cover pomades and brilliantines which contain ingredients that affect the physiological functions of the body, the scalp or the hair or for which therapeutic claims are made.

0.4 The raw materials used shall be free from any harmful effect on the skin, scalp or hair and the interaction of the raw materials used in the finished pomade/brilliantine shall be free from toxic or sensitizing effects. For determining dermatological safety of a new formulation or of a new raw material in an old formulation, reference may be made to IS : 4011 - 1982* for prophetic testing. It shall be the responsibility of the manufacturers to satisfy themselves of dermatological safety of their formulation before releasing the product for sale.

0.5 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 the standard.

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

1. SCOPE

1.1 This standard prescribes requirements and methods of sampling and test for pomades and brilliantines which are either vegetable oil or petroleum based but excludes oil emulsions.

1.2 This standard does not cover hair oils and liquid brilliantines.

2. TYPES

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<tr>
<th>Type</th>
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<tbody>
<tr>
<td>1</td>
<td>Mineral oils and waxes</td>
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<tr>
<td>2</td>
<td>Vegetable oils and waxes</td>
</tr>
<tr>
<td>3</td>
<td>Mineral oils and fatty acids</td>
</tr>
<tr>
<td>4</td>
<td>Mixture of mineral and vegetable oils and waxes</td>
</tr>
</tbody>
</table>

3. REQUIREMENTS

3.1 Description — The pomade/brilliantine shall be in the form of a soft, homogeneous, unctuous mass.

3.2 Ingredients — Unless specified otherwise, all the raw materials used in the manufacture of pomades/brilliantines shall conform to the requirements prescribed in the relevant Indian Standards, wherever available.

3.2.1 Dyes used in the manufacture of pomades and brilliantines shall comply with the provisions of IS : 4707 (Part 1)-1988*.

*Classification of cosmetic raw materials and adjuncts: Part 1 (first revision).
3.2.2 Ingredients other than dyes shall comply with the provisions of IS : 4707 (Part 2)-1973.

3.2.3 The quality of the base material used in the manufacture of different types of pomades and brilliantries shall conform to those given below.

3.2.3.1 For Type 1 — The oils and mineral waxes used as the base shall be of the quality specified below:
   a) Mineral oil — IS : 7299-1974†.
   b) Paraffin wax — Type 1 of IS : 4654-1974‡.
   c) Microcrystalline wax
   d) Soft petroleum jelly — IS : 4887-1980§.

3.2.3.2 For Type 2 — The vegetable base shall conform to:
   a) Castor oil — IS : 11486-1985 ‡.
   b) Coconut oil — IS : 11470-1985¶.
   c) Groundnut oil — IS : 11375-1985**.
   d) Sesame oil — IS : 11376-1985††.

*Classification of cosmetic raw materials and adjuncts: Part 2.
†Specification for mineral oil for cosmetic industry.
‡Specification for paraffin wax (first revision).
§Specification for petroleum jelly for cosmetic industry (first revision).
¶Specification for castor oil for cosmetic industry.
**Specification for coconut oil for cosmetic industry.
††Specification for sesame oil for cosmetic industry.

3.2.3.3 For Type 3 — The fatty acid base shall conform to stearic acid (see IS : 9681-1980††).  

3.2.3.4 For Type 4 — Natural or synthetic wax base shall conform to IS : 4028-1982‡‡.

3.2.4 A list of ingredients conventionally used in the formulation of pomades/brilliantries of various types is given for information only in Appendix A. The manufacturers may formulate with any appropriate formula to meet the requirements of any one of the four types.

3.3 The pomades/brilliantries shall comply with the requirements given in Table 1 when tested according to the methods prescribed in Appendix B. Reference to the relevant clauses of Appendix B is given in col 4 of the Table 1.

4. PACKING AND MARKING

4.1 Packing — The pomades/brilliantries may be packed in wide mouthed glass, plastic or metal containers with easy opening closures. The material shall be adequately protected from extraneous contamination.

| TABLE 1 REQUIREMENTS FOR POMADES AND BRILLIANTRIES  
( Clauses 3.3, and B-6.3.3 ) |
<table>
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*If all such raw materials requiring tests for heavy metals and arsenic have been so tested and they comply with the requirements, then the manufacturer may not test the finished cosmetic for heavy metals and arsenic.

2
4.2 Marking — The containers shall be legibly marked with the following information:
   a) Name and type of the material;
   b) Manufacturer's name and/or recognized trade-mark, if any;
   c) Net mass of the material; and
   d) Batch number, in code or otherwise, to enable the lot of manufacture to be traced back from records.

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

Note — The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act 1966 and the Rules and Regulations made thereunder. The Standard 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 BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers or processors may be obtained from the Bureau of Indian Standards.

5. SAMPLING

5.1 Representative samples of the material shall be drawn as prescribed in IS : 3958-1984*.

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

5.3 The material shall be taken to have conformed to the specification if the composite sample passes all the tests.

*Methods of sampling cosmetics (first revision).

APPENDIX A

( Clause 3.2.4 )

LIST OF RAW MATERIALS CONVENTIONALLY USED IN THE FORMULATION OF POMADES AND BRILLIANTINES

A-1. Type 1 — Based on mineral oils and waxes
   a) Paraffin wax
   b) Microcrystalline wax
   c) Petroleum jelly
   d) Mineral oil
   e) Perfume and colour

A-2. Type 2 — Based on vegetable oils and waxes
   a) Castor oil
   b) Beeswax
   c) Paraffin wax
   d) Coconut oil
   e) Perfume and colour

A-3. Type 3 — Based on mineral oils and fatty acids
   a) Stearic acid
   b) Mineral oil
   c) Perfume and colour

A-4. Type 4 — Based on mixture of mineral and vegetable oils and waxes
   a) Coconut oil
   b) Mineral oil
   c) Beeswax
   d) Soft petroleum jelly
   e) Perfume and colour

APPENDIX B

( Clause 3.3 )

METHODS OF TEST FOR POMADES AND BRILLIANTINES

B-1. QUALITY OF REAGENTS

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

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

B-2. DETERMINATION OF MELTING POINT

B-2.1 Procedure

B-2.1.1 Heat a quantity of the sample on a water bath while stirring until it reaches a temperature of 90 to 92°C. Cool the molten sample to a temperature of 8 to 10°C above the expected melting point. Chill the bulb of a thermometer (range 1 to 100°C) to 5°C, wipe it dry and while it is still cold, dip it into the molten sample so that approximately half of the bulb is submerged. Withdraw it immediately and hold it vertically away from heat until the wax surface dulls, then dip it for five minutes into a water bath having a temperature not higher than 16°C.

B-2.1.2 Fix the thermometer prepared in B-2.1.1 securely in a test tube so that its lowest point is about 15 mm above the bottom of the test tube. Suspend the test tube in a water bath adjusted to 16°C and raise the temperature of the
bath at a rate of 2°C per minute up to 30°C, then change the rate of rise to 1°C per minute and note the temperature at which the first drop of the melted sample leaves the thermometer. Repeat the determination twice on a freshly melted portion of the sample. If the variation in three determinations is less than 1°C take the average of the three as the melting point. If the variation in three determinations is more than 1°C, make two additional determinations and take the average of five.

B-3. DETERMINATION OF SULPHATED ASH

B-3.1 Reagent

B-3.1.1 Dilute Sulphuric Acid — approximately 5 N.

B-3.2 Procedure — Heat a porcelain or silica dish of 50 to 100 ml capacity to redness; cool in a desiccator and weigh. Place about 20 g of the sample, accurately weighed, in the dish. Heat the dish gently by means of a Bunsen burner until the oil can be ignited at the surface. Remove the burner and allow the oil to burn completely, taking care that all the free carbon on the sides of the dish is completely burnt. Heat the residue with a strong flame or in a muffle furnace until all the carbonaceous matter has disappeared. Cool the dish, add a few drops of dilute sulphuric acid, heat gently to drive off the acid and then heat strongly. Cool the dish again in the desiccator and weigh it. Repeat the heating, cooling and weighing until constant mass is obtained.

B-3.3 Calculation

\[ \text{Sulphated ash, percent by mass} = \frac{m \times 100}{M} \]

where

\[ m = \text{mass in g of the residue, and} \]
\[ M = \text{mass in g of the sample taken for the test.} \]

B-4. TEST FOR SULPHUR AND SULPHIDES

B-4.1 Reagents

B-4.1.1 Copper Strips — 1 cm in width, and freshly polished.

B-4.2 Procedure — Melt in a beaker about 100 g of the sample and keep in a water bath at a temperature of 95°C. Then place a strip of copper in the melted sample so that it is partially immersed in it and allow to remain for 10 minutes.

B-4.2.1 The material shall be taken to have passed the test if the copper strip used in the test shows no tarnishing when compared with another freshly polished copper strip.

B-5. TEST FOR ARSENIC

B-5.1 Reagents

B-5.1.1 Concentrated Sulphuric Acid — see IS : 266-1977*.

B-5.1.2 Concentrated Nitric Acid — see IS : 264-1976†.

B-5.2 Procedure

B-5.2.1 Preparation of Sample — Weigh 2000 g of the sample in a Kjeldahl flask of 500-ml capacity. Add 15 ml of concentrated sulphuric acid followed by 4 ml of concentrated nitric acid. Heat cautiously. Add drop by drop more nitric acid, if required, from a pipette to speed up the oxidation of the sample. The total amount of nitric acid shall be noted for use in the control test. When oxidation is complete, the solution is clear and faint yellow; at this stage, add 20 ml of water and again boil to fuming. Ensure removal of all nitric acid.

B-5.2.2 Carry out the test for arsenic with the solution prepared in B-5.2.1 prescribed as in IS : 2088-1983‡. Compare the stain obtained with that produced with 0.004 g of arsenic trioxide.

B-6. TEST FOR HEAVY METALS

B-6.1 Apparatus

B-6.1.1 Nessler Cylinders — 50 ml capacity.

B-6.2 Reagents

B-6.2.1 Ammonium Acetate Solution — 10 per cent.

B-6.2.2 Ammonium Citrate Solution — Dissolve 8.75 g of citric acid in water, neutralize with ammonia and dilute with water to 100 ml.

B-6.2.3 Ammonium Hydroxide — 10 percent (m/m).

B-6.2.4 Potassium Cyanide Solution — 10 percent (m/m).

B-6.2.5 Sodium Sulphide Solution — 10 percent (m/m).

B-6.2.6 Standard Lead Solution — Dissolve 1.600 g of lead nitrate in water and 10 ml of concentrated nitric acid and dilute to 1000 ml. Pipette out 10 ml of the solution and dilute it again to 1000 ml with water. One milliliter of the final solution contains 0.01 mg of lead (as Pb). The solution should be freshly prepared.

*Specification for sulphuric acid (second revision).
†Specification for nitric acid (second revision).
‡Methods for determination of arsenic (second revision).
B-6.3 Procedure

B-6.3.1 Preparation of Sample — Treat 2.000 g of the sample as prescribed in B-5.2.1.

B-6.3.2 Take the solution prepared in B-6.3.1 in a Nessler cylinder, add 10 ml of ammonium acetate solution, 5 ml of ammonium citrate solution, ammonium hydroxide to make it distinctly ammoniacal and 1 ml of potassium cyanide solution and dilute to 50 ml with water; then add two drops of sodium sulphide solution and mix well. Carry out a control test using 4 ml of the standard lead solution and the same quantities of other reagents as used in the test with the material.

B-6.3.3 The material shall be taken as not having exceeded the limit prescribed in Table 1 if the intensity of colour produced with the material is not greater than that produced in the control test.

B-7. DETERMINATION OF CONSISTENCY

B-7.0 Outline of the Method — Determination of consistency of the material is made by measuring penetration of a standard cone at 25°C ± 0.5°C.

B-7.1 Apparatus

B-7.1.1 Penetrometer — Any suitable penetrometer which permits the specified cone to drop vertically without appreciable friction for at least 40 mm and which indicates accurately the depth of penetration to the nearest 0.1 mm. The instrument shall have a table to carry the test sample which may be adjusted to the horizontal before conducting the test. A mechanism for releasing and clamping the loaded cone shall be provided.

B-7.1.2 Cone — Consisting of a conical body of brass or corrosion resistant steel with detachable hardened steel tip, constructed to conform to the dimensions and tolerances shown in Fig. 1. The total moving mass, namely, that of the cone and its movable attachments, shall be 150.0 ± 0.1 g. The attachments consist of a rigid shaft having a suitable device at its lower end for engaging the cone. The outer surface shall be polished to a very smooth finish.

B-7.1.3 Constant Temperature Bath — a water bath capable of regulating the temperature at 25°C and of suitable design for conveniently bringing the sample container to the test.

All dimensions in millimetres.

FIG. 1 PENETROMETER CONE
temperature. The bath should be provided with a cover to maintain the temperature of the air above the sample at 25°C.

B-7.1.4 Timing Device — A stop-watch or any other suitable instrument capable of measuring an interval of 5 seconds to an accuracy of 0.2 second.

B-7.1.5 Sample Container — Flat-bottomed, metal or glass cylinders that are 100 ± 5 mm in diameter and not less than 60 mm in height.

B-7.2 Procedure — Melt a quantity of the sample at 82.0 ± 2.5°C, pour into one or more of the sample containers, filling to within 6 mm of the brim. Cool at 25.0 ± 0.5°C over a period of not less than 16 hours, protecting from draughts. Two hours before the test, place the containers in a water bath at 25.0 ± 0.5°C. If the room temperature is below 23.5°C or above 26.5°C, adjust the temperature of the cone to 25.0 ± 0.5°C by placing it in a water bath.

B-7.2.1 Without disturbing the surface of the sample, place the container on the penetrometer table, and lower the cone until the tip just touches the top surface of the sample at a spot 25 to 39 mm from the edge of the container. Adjust the zero setting and quickly release the plunger, then hold it free for 5 seconds. Secure the plunger, and read the total penetration from the scale. Make three or more trials each so spaced that there is no overlapping of the areas of penetration. Where the penetration exceeds 20 mm, use a separate container of the sample for each trial. Read the penetration to the nearest 0.1 mm. Calculate the average of three or more readings, and conduct further trials to a total of 10 if the individual results differ from the average by more than ± 3 percent.

B-7.3 Calculation

Consistency = 10.4

where

A = mean of all the values of penetration in mm.

B-8. TEST FOR RANCIDITY

B-8.0 Test for rancidity is mainly intended for pomades and brilliantines based on vegetable oils. This test detects any onset of incipient rancidity, arising as a result of the product being vegetable oil based.

B-8.1 Reagents

B-8.1.1 Concentrated Hydrochloric Acid — see IS : 265-1976*.

*B specification for hydrochloric acid (second revision).

B-8.1.2 Phloroglucinol Solution — Dissolve 0.1 g of phloroglucinol in 100 ml of diethyl ether.

B-8.2 Procedure — Shake 10 ml of the material, melt if necessary, with 10 ml of concentrated hydrochloric acid and 10 ml of phloroglucinol solution. Shake for 1 minute.

B-8.2.1 The material shall be taken to have passed the test if no pink colour develops.

B-9. BLEED NUMBER

B-9.1 Procedure — Heat the sample to 95°C. Then allow to cool to 10°C above its melting point. Dip a glass tube (of internal diameter 4 mm and wall thickness 1 mm) into the sample so that when it is removed with the upper end closed with a finger, it contains approximately a 25 mm column of molten sample. From approximately 12 mm above the filter paper (Whatman No. 1 or equivalent), allow 5 evenly spaced drops of the sample to fall separately on the paper. The droplets should have a diameter of 6 to 8 mm. When the droplets solidify, place the paper on a watch glass and insert in an oven kept at 30°C for 24 hours. After 24 hours, determine the diameter of each droplet plus the oil ring which surrounds it. Subtract the diameter of the droplet from the oil ring and record the result in mm. The average of these results is the bleed number.

B-10. STABILITY TEST

B-10.1 Apparatus

B-10.1.1 Ultra Violet Lamp — with emission at 360 nm.

B-10.2 Procedure — Place 50 ml of the material in a 100 ml glass beaker. Turn on the ultra violet lamp and expose the samples at a distance of 12 to 14 cm below the lamp for 6 hours. After the specified time, remove the samples, cool to room temperature and compare for any change in odour or colour. The same volume of material shall be employed for all tests so that comparison is ensured on a reproducible basis.

Notes — The output of the ultra violet lamp diminishes with time in service. A log of number of hours of the lamp in use should be maintained. The lamp is to be replaced after the specified hours of service, as recommended by the lamp manufacturer.

B-10.3 Evaluation — Evaluation is done by comparing the test material against an unexposed specimen from the same sample.
Bureau of Indian Standards

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Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of ‘BIS Handbook’ and ‘Standards Monthly Additions’.

Amendments Issued Since Publication

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BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002
Telephones: 331 01 31, 331 13 75

Telegrams: Manaksansth (Common to all offices)

Regional Offices:

Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002  
Telephones: 331 01 31; 331 13 75

Eastern : 1/14 C. I. T. Scheme VII M, V. I. P. Road, Maniktola CALCUTTA 700054  
Telephones: 37 84 99, 37 85 61; 37 86 26, 37 86 62

Northern : SCO 335-336, Sector 34-A, CHANDIGARH 160022  
Telephones: 60 38 43; 60 20 25

Southern : C. I. T. Campus, IV Cross Road, MADRAS 600113  
Telephones: 235 02 16, 235 04 42; 235 15 19, 235 23 15

Western : Manakalaya, E9 MIDC, Marol, Andheri (East) BOMBAY 400093  
Telephones: 632 92 95, 632 78 58; 632 78 91, 632 78 92

Branches: AHMADABAD. BANGALORE. BHOPAL. BHUBANESHWAR. COIMBATORE. FARIDABAD. GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. KANPUR. LUCKNOW. PATNA. THIRUVANANTHAPURAM.