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Mazdoor Kisan Shakti Sangathan

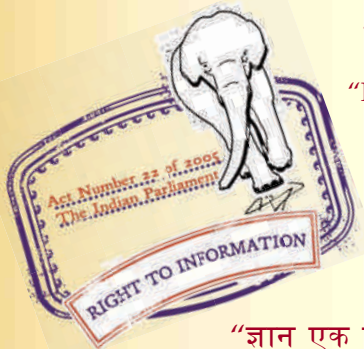
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“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 5405 (1980): Sanitary Napkins [MHD 14: Hospital Planning]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard
**SPECIFICATION FOR
SANITARY NAPKINS**
(First Revision)

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BUREAU OF INDIAN STANDARDS
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NEW DELHI 110002

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May 1980

Indian Standard
**SPECIFICATION FOR
 SANITARY NAPKINS**
(First Revision)

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— AMENDMENT NO. 1 OCTOBER 1981
TO
IS:5405-1980 SPECIFICATION FOR SANITARY NAPKINS
(*First Revision*)

Alterations

(*Page 5, clause 5.1, line 5*) - Substitute
'stain through/leak through' for 'show up'.

(*Page 7, clause A-1.2, last line*) - Substitute
'staining through/leaking through' for 'showing up'.

(CPDC 19)

Indian Standard
SPECIFICATION FOR
SANITARY NAPKINS
(*First Revision*)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 15 February 1980, after the draft finalized by the Surgical Dressings Sectional Committee had been approved by the Consumer Products and Medical Instruments Division Council.

0.2 This standard was first published in 1969. Since then many suggestions were received for improvement. This standard is being revised to incorporate the suggestions received from time to time.

0.3 In preparing this standard, considerable assistance has been derived from the following documents:

DDD-P-006 6a (GSA-FSS) Interim Federal Specification for Pad, Sanitary. Federal Supply Service, Washington.

Comparative test report on sanitary towels *Which* March 1964. Consumer Association, London.

0.4 This standard contains clause 3.1 which calls for an agreement between the purchaser and the supplier regarding dimensions. However, *recommended dimensions have been specified.*

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 this standard.

1. SCOPE

1.1 This standard covers the requirements for sanitary napkins for external use.

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

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2. MATERIALS

2.1 Absorbent Filler — The filler material, such as cellulose pulp, cellulose wadding, tissue, cotton, etc, shall be free from lumps, oil spots, dirt or foreign material.

2.2 Covering — The covering of the absorbent filler shall be of a good quality cotton or rayon knitted sleeving, gauze or non-woven fabric with sufficient porosity to permit the assembled pad to meet the absorbency requirements. If cotton gauze is used, it shall conform to IS 758-1975*.

3. SIZES

3.1 Sizes of sanitary napkins shall be as agreed to between the purchaser and the supplier. However recommended sizes are as follows

Size	Pad Length mm	Width mm	Thickness mm
Regular	200 ± 20	60 to 75	15 ± 2
Large	240 ± 20		
Extra large	280 ± 20		

3.1.1 The thickness shall be measured by stacking 10 complete pads and measuring the stack height. The average thickness for the 10 pads shall be used as the pad thickness.

4. MANUFACTURE, WORKMANSHIP AND FINISH

4.1 The absorbent filler shall be arranged and neatly cut to the required size of the pad and form a uniform thickness throughout without any wrinkles or distortion. It shall be placed in the covering in such a way that it does not cause lump formation with the effect of sudden pressure. The covering fabric shall cover the filler completely, and in case of napkins with tabs, extend beyond the length of the filler to form tabs or loops at each end for securing the pad in use. In case of tabless napkins, an adhesive system or other suitable method may be introduced for holding the napkin securely in position. The sanitary napkins shall have a non-absorbent barrier on one side which shall have an identifying thread or marking indicating clearly the side of the barrier. In case of napkins that are heat sterilizable, the barriers shall also be heat resistant.

4.2 When the sanitary napkins are claimed as disposable, that is, disposable in lavatories, they shall be manufactured from disposable,

*Specification for handloom cotton gauze, absorbent (second revision)

material. If cotton hose or gauze is used as covering, the instructions for the use of napkins shall clearly indicate that the non-absorbent barrier should be removed before flushing.

4.3 The sanitary napkins shall have a very soft feel and when worn shall not chafe or give any uncomfortable feeling. They shall be free from all sorts of foreign matter.

5. REQUIREMENTS

5.1 Absorbency and Ability to Withstand Pressure after Absorption — The sanitary napkins shall absorb 30 ml of coloured water or oxalated sheep or goat blood or test fluid when flowed on to the centre of the napkin (at the rate of 15 ml per minute) and it shall not show up at the bottom or sides of the sanitary napkin, when tested according to Appendix A.

5.1.1 The tabless napkins shall absorb 20 ml of coloured water or oxalated sheep or goat blood or test fluid when tested by the method given in 5.1.

5.2 Disposability — A disposable sanitary napkin with the covering removed, shall be immersed in 15 litres of water and stirred. The pad shall disintegrate in the water in not more than 5 minutes.

5.3 pH Value — The sanitary napkins shall be free from acids and alkali and the pH of the absorbent material shall be 6 to 8.5 when tested by the method given in IS : 1390-1961*.

5.4 Instructions — Following instructions shall be included in every packet of sanitary napkins:

- a) Method of use;
- b) Indication as to which side is absorbent; and
- c) Disposal instructions, such as that the napkins without covering can be disposed off in water closets.

6. TESTS

6.1 Absorbency and ability to withstand pressure after absorption shall be tested as given in Appendix A.

6.1.1 Type Test — Use oxalated sheep or goat blood or test fluid.

6.1.2 Routine Test — Use coloured water.

*Methods for determination of pH value of aqueous extracts of textile materials.

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7. PACKING

7.1 Sanitary napkins shall be packed in polyethylene lined carton or polyethylene bag. The carton shall contain an instruction leaflet or shall have the instructions printed on the outside of the polyethylene bag or carton.

8. MARKING

8.1 Each carton shall be marked with the manufacturer's name or trade-mark, the number of sanitary napkins contained in it, and size designation.

8.1.1 *The carton 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.

APPENDIX A

(Clauses 5.1 and 6.1)

METHOD FOR DETERMINATION OF ABSORBENCY AND ABILITY TO WITHSTAND PRESSURE AFTER ABSORPTION

A-1. PROCEDURE

A-1.1 Test Fluid — To about 6 l of boiling water in a 10 l stainless steel or glass vessel add 4 g of methyl paraben and stir until dissolved. Add 740 g of the gum arabic or gum acacia and stir until all the gum is dissolved. Add water to make 8.05 l and allow the solution to stand for at least 24 hours. Filter through a layer of glass wool. Add 9 g of methylene blue, 1470 ml of glycerine, and 840 ml of water and stir. The total volume will be approximately 9.2 l. Mix thoroughly and allow to stand at least for 24 hours. Shake before use.

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A-1.2 Lay the sanitary napkin on a flat level transparent surface, so that the underside of the sanitary napkin can be observed. Drip, at the rate of 15 ml per minute, 30 ml (20 ml for tabless napkins) of the fluid maintained at a temperature of $27^{\circ} \pm 2^{\circ}\text{C}$ on to the centre of the sanitary napkin from a height of approximately 1 to 2 mm. After the napkin has absorbed the full amount of fluid, keep a standard weight of 1 kgf for one minute on the portion where the fluid was absorbed. Observe the back and sides of the sanitary napkin for any fluid showing up.

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