

X-RAY-DETECTABLE ABSORBENTS

X-Ray-Detectable Abdominal Pad

Definition An X-Ray-Detectable Abdominal Pad consists of Absorbent Cotton Gauze Type 13 Light as described under X-Ray-Detectable Cotton Gauze, or Absorbent Cotton and Viscose Gauze Type 1 as described under X-Ray-Detectable Cotton and Viscose Gauze, folded into rectangles or squares, in such a manner that no cut edges are exposed, and stitched round the open sides. A tape extending not less than 25 cm from the pad may be stitched into one corner. The pad incorporates an X-ray-opaque component consisting of a distinctly coloured, continuous monofilament or multifilament yarn or a strip of suitable material, not less than 7 cm × 0.8 cm, in the body of the pad. The X-ray-detectable monofilament or multifilament yarn is securely heat-bonded to, or woven into, the fabric. The X-ray-detectable strip is securely sewn into one corner of the pad.

Relative movement of the layers of the pad may be prevented by one or two diagonal lines of stitching through all layers.

Fabric

Complies with the requirements for Absorbent Cotton Gauze Type 13 Light described under X-Ray-Detectable Cotton Gauze or Absorbent Cotton and Viscose Gauze Type 1 described under X-Ray-Detectable Cotton and Viscose Gauze.

X-ray-detectable component

Definition The X-ray-detectable component consists of suitable materials containing not less than 55% of Barium Sulphate, or a quantity of any other suitable material giving comparable X-ray opacity. It is reasonably free from loose fibres and particles and does not impair the softness or flexibility of the pad.

Weight of X-ray-detectable yarn Not less than 0.50 g m⁻¹ for monofilament yarn and not less than 0.28 g m⁻¹ for multifilament yarn when determined by carefully removing the X-ray-detectable component from the material being examined and measuring its length and weight.

X-ray opacity Complies with the test, Appendix XX R.

Tape

Definition The tape consists of a close-woven fabric in which the warp and weft threads are of cotton, or of combined cotton and viscose yarn, not less than 1 cm wide. The tape and sewing thread, if cotton, are bleached to a good white.

Fluorescence *The tape and, if cotton, the sewing thread comply with the following test.*

When examined under ultraviolet light (365 nm) displays only a slight brownish violet fluorescence and a few yellow particles. Not more than a few isolated fibres show an intense blue fluorescence.

If the sewing thread is polymeric it complies with the following test.

A. When examined under ultraviolet light (365 nm) displays only a slight brownish violet fluorescence and a few yellow particles. Not more than a few isolated fibres

show an intense blue fluorescence.

B. If the material being examined does not comply with test A, heat 2 g of the thread with 200 ml of water at 37° for 24 hours, decant the liquid through a sieve of nominal mesh aperture 106 µm, squeezing the thread to remove as much of the liquid as possible, and allow to cool. Examine under ultraviolet light (365 nm) 25 ml of the extract in a cylindrical glass tube. The solution shows no more fluorescence than that of an equal volume of water.

Minimum breaking load The force required to break the tape, pull the tape from the pad, cause the tape to break at the seam, or to disrupt the body of the pad, is not less than 50 N (about 5 kgf) when determined by inserting the pad in the apparatus described in the test for *minimum breaking load*, Appendix XX E, Method I, so that the tape and the opposite corner of the pad are held firmly in the grips.

Water-soluble substances Sewing thread, 0.50%; tape, 0.50%, Appendix XX M.

Stitching Not fewer than 31 stitches per 10 cm.

Labelling The label on the unit container states whether the pad is supplied with or without a tape stitched into a corner.

The label on the unit container, the label on the shelf container and the label on the outer transit container state whether the fabric complies with the requirements for Absorbent Cotton Gauze Type 13 Light or for Absorbent Cotton and Viscose Gauze Type 1.

X-Ray-Detectable Cotton and Viscose Gauze

X-Ray-Detectable Absorbent Cotton and Viscose Gauze

Definition X-Ray-Detectable Cotton and Viscose Gauze consists of Absorbent Cotton and Viscose Gauze Type 1 into which is incorporated an X-ray-opaque component consisting of a distinctly coloured, continuous monofilament or multifilament yarn. The X-ray-detectable component is securely heat-bonded to the fabric or is woven into the fabric.

X-Ray-Detectable Cotton and Viscose Gauze may be dyed green.

Fabric

The fabric complies with the requirements for Absorbent Cotton and Viscose Gauze Type 1, described below, except that if dyed, the test for Colouring matter does not apply.

X-ray-detectable component

Definition The X-ray-detectable component consists of suitable materials containing not less than 55% of Barium Sulphate, or a quantity of any other suitable material giving a comparable X-ray opacity. It is reasonably free from loose fibres and particles and does not impair the softness and flexibility of the gauze.

Weight of X-ray-detectable yarn Not less than 0.50 g m⁻¹ for monofilament yarn and not less than 0.28 g m⁻¹ for multifilament yarn when determined by carefully removing the X-ray-detectable component from the material being examined and measuring its length and weight.

X-ray opacity Complies with the test, Appendix XX R.

Colour fastness If dyed, complies with the tests, Appendix XX O.

Labelling The label on the unit container, the label on the shelf container and the label on the outer transit container state, where appropriate, that the gauze has been dyed.

ABSORBENT COTTON AND VISCOSE GAUZE TYPE 1

Definition Absorbent Cotton and Viscose Gauze Type 1 consists of fabric of plain weave, in which either (a) the warp threads are of cotton and the weft threads are of viscose or of combined cotton and viscose yarn or (b) the warp threads are of combined cotton and viscose yarn and the weft threads are of cotton or of combined cotton and viscose yarn. It is bleached to a good white and purified. It is practically odourless, reasonably free from weaving defects and contains not more than traces of leaf residue, seed coat and other impurities.

Fibre identification Complies with the tests for *cotton* and for *viscose*, Appendix XX A.

Content of viscose Not more than 45% when determined by Method 3 of British Standard 4407:1975 (Methods of test: Quantitative analysis of fibre mixtures).

Absorbency *Sinking time* Not more than 10 seconds, Appendix XX L1, Method I.

Acidity or alkalinity To 10 g add 100 ml of *water*, macerate for 2 hours in a closed vessel, decant the liquid, carefully squeezing out the residual liquid with a glass rod, mix, reserve 10 ml for the test for Surface-active substances and filter the remainder. To 25 ml of the filtered extract add 0.15 ml of *phenolphthalein solution*; to another 25 ml add 0.05 ml of *methyl orange solution*. Neither solution shows a pink colour.

Colouring matter Slowly extract 10 g in a percolator about 30 mm in diameter with *ethanol* (96%) until 50 ml of extract is obtained, pour the liquid into a colourless glass cylinder and examine a 20-cm layer against a white background. A very faint yellowish tinge may be observed, but no bluish or greenish tinge is present.

Threads per 10 cm Warp, 69 to 77; weft, 53 to 61, Appendix XX C1, Method I.

Weight per unit area Not less than 14.0 g m^{-2} , Appendix XX D1, Method III.

Ether-soluble substances Not more than 0.50%, Appendix XX N.

Fluorescence When examined under ultraviolet light (365 nm) a two-ply layer may display only a slight brownish violet fluorescence and a few yellow particles. Not more than a few isolated fibres show an intense blue fluorescence.

Starch and dextrin To the 200 ml of cooled extract reserved in the test for Water-soluble substances add 5 ml of 5M *acetic acid* and 0.15 ml of 0.05M *iodine*. No blue, violet, reddish or brownish colour is produced.

Surface-active substances Shake vigorously in a clean test tube the portion of the aqueous extract reserved in the test for Acidity or alkalinity and examine after 10 minutes. Not more than a ring of froth, in contact with the walls of the tube, remains.

Water-soluble substances Not more than 0.50%, Appendix XX M. Reserve 200 ml for the test for Starch and dextrin before filtering the extract.

Loss on drying When dried to constant weight at 100° to 105° , loses not more than 11.0% of its weight. Use 5 g.

Sulphated ash For products containing viscose, not more than 0.45%; for products containing delustrated viscose, not more than 1.2%, Appendix IX A, Method II. Use 5 g.

In the absence of instructions to the contrary in the prescription or order, undyed X-Ray-Detectable Cotton and Viscose Gauze shall be supplied.

X-Ray-Detectable Cotton and Viscose Ribbon Gauze

X-Ray-Detectable Absorbent Cotton and Viscose Ribbon Gauze

Definition X-Ray-Detectable Cotton and Viscose Ribbon Gauze consists of Absorbent Cotton and Viscose Ribbon Gauze into which is incorporated an X-ray-opaque component consisting of a distinctly coloured, continuous monofilament or multifilament yarn. The X-ray-detectable component is securely heat-bonded to, or is woven into, the fabric.

Fabric

The fabric complies with the requirements for Absorbent Cotton and Viscose Ribbon Gauze described below.

X-ray-detectable component

Definition The X-ray-detectable component consists of suitable materials containing not less than 55% of Barium Sulphate or a quantity of any other suitable material giving a comparable X-ray opacity. It is reasonably free from loose fibres and particles and does not impair the softness or flexibility of the ribbon gauze.

Weight of X-ray-detectable yarn Not less than 0.50 g m^{-1} for monofilament yarn or not less than 0.28 g m^{-1} for multifilament yarn when determined by carefully removing the X-ray-detectable component from the material being examined and measuring its length and weight.

X-ray opacity Complies with the test, Appendix XX R.

ABSORBENT COTTON AND VISCOSE RIBBON GAUZE

Definition Absorbent Cotton and Viscose Ribbon Gauze consists of woven fabric supplied as ribbons of various widths with fast selvedge edges, in which the warp threads are of cotton and the weft threads are of viscose or of combined cotton and viscose yarn. It is purified, bleached and made absorbent either before or after weaving. It is white, practically odourless and reasonably free from weaving defects and it contains not more than slight traces of leaf residue, pericarp, seed husks or other impurities. It does not contain any fibres other than those of cotton and viscose. It is in one continuous length.

Fibre identification A. Untwist a few threads in the warp and in the weft to free a few of the fibres to be examined. The warp threads comply with tests A and B for *cotton*,