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उत्पाद मैनुअल
Textiles – Polyester Staple Fibres
IS17263:2022 के अनुसार

PRODUCT MANUAL FOR
Textiles – Polyester Staple Fibres
ACCORDING TO IS 17263:2022

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में अभ्यास और पारदर्शिता के संचालन में पारदर्शिता सुनिश्चित करने के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन लाइसेंस/प्रमाणपत्र प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

1	उत्पाद Product	IS:17263:2022
	शीर्षक Title	Textiles-Polyester Staple Fibres-Specification
	संशोधनों की संख्या No.of amendments	06
2	नमूना दिशानिर्देश Sampling Guidelines	
a)	कच्चा माल Raw material	: No specific requirement
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	Please refer ANNEX-A
c)	नमूने का आकार Sample Size	05 kg approx. plus 02 metres of fabric made from fibres
3	पराक्षण उपकरणों का सूची List of Test Equipment	Please refer ANNEX-B
4	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	Please refer ANNEX-C

5	एक दिन में संभावित परीक्षण Possible tests in a day	
	a) Cross-section of yarn(CI 4.1.1, 4.1.2, 4.2, 4.3) b) Linear Density(Table 3, CI 6.1) c) Cut Length (Table 3, CI. 6.1) d) Average tenacity and Elongation at Break(Table 3, CI. 6.1) e) Moisture Regain(Table 4, CI. 6.1) f) Hollowness(for hollow fibres only)(Table 3, CI. 6.1) g) Sinking time(For spunlace fibres only)(Table 3, CI. 6.1) h) L-Colour Value and Whiteness Index(Table 4, CI 6.1) i) Water Soluble Matter(Table 4, CI. 6.1) j) Colour Strength for Dope Dyed Yarn(Table 4, CI. 6.1) k) Freedom from Major defects (Clause 6.2) l) Commercial Mass(Claude 6.6)	
6	लाइसेंस का दायरा /Scope of the Licence:	
	Licence is granted to use Standard Mark as per IS 17263:2022 with the following scope:	
	Name of the product	Textiles - Polyester Staple Fibres
	Type of Fibres Based on Cross-Section	- Cross Sectional View - Circular, Profiled(Angular/ Lobal/Serrated/Oval/Ribbon Like) - Cross Sectional Area - Solid/Hollow; - Multi Component Fibres - Concentric Cover-Core/Matrix/ Sheath-Core;
	Type of Fibres Based on Lustre	- Full Dull (FD); - Semi Dull (SD)/ Semi Dull Optically Bright (SDOB); - Bright (BRT)/Optically White (OW) - Super Bright (SBRT);
	Type of Fibres Based on Dyeing Method	- Disperse Dyeable [Conventional Dyeable (COD)/Stock Dyeable (STD)/Easy Dyeable (ED)] - Cationic Dyeable (CD)/Easy Dyeable Cationic (EDCD) - Dope Dyed (DD)
	Type of Fibres Based on Properties	- Filling/Non woven - Low Pill - Medium Tenacity - High Tenacity(HT) - Super High Tenacity(SHT) - High tenacity(Dope Dyed) - Spunlace fibres
	Optional/Additional requirements	- Virgin/Recycled fibre - High Shrinkage/Non High Shrinkage; - Siliconized/Non-Siliconized; - Sheet form or Not; - Hollow Fibres or Not; - Flame Retardant/Non-Flame Retardant; - Anti-Microbial/Non Anti-Microbial; - Ultra Violet light Resistant/Non-Ultra Violetlight Resistant; - With or without colour fastness to rubbing - With or without colour fastness to perspiration (acidic and alkaline)
	Fibre Classification based on density	Coarse, Medium Fine, Fine, Micro, Super-microfibres including nanofibers
	Eco Mark	With or Without ECO Mark;

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ANNEXA
GROUPING GUIDELINES

1. Based on the classification and identification of PSF, the following grouping guidelines shall apply for Grant of Licence and Change in Scope of Licence:-

A) Based on declared Linear Density range, the PSF is classified into following groups

Group	Fibre Denier (dtex)	Fibre classification
I	> 2.0 (2.2)	Coarse
II	2.0 to 1.2 (2.2 to 1.3)	Medium fine
III	< 1.2 to 1.0 (1.3 to 1.1)	Fine
IV	< 1.0 to 0.8 (1.1 to 0.9)	Micro
V	< 0.8 (0.9)	Super-microfibres including nanofibers when their cross-sectional dimensions are within a range of nm, that is of < 0.1dtex or < 1µm

One sample of any linear density from each group shall be tested to cover the relevant fibre classification in the scope of licence

- B)** Similarly, one sample of PSF of any class/type shall be drawn to cover all the classes/types of PSF based on cross sectional view, cross sectional area, and multi component fibres, intended to be covered in the scope of licence.
- C)** Separate samples of each dyeing method (Virgin (Coloured/Without Dyeing), Disperse Dyeable [Conventional Dyeable (COD)/Stock Dyeable (STD)/Easy Dyeable (ED)] Cationic Dyeable (CD)/Easy Dyeable Cationic (EDCD) Dope Dyed (DD)/Optically White (OW) shall be drawn and tested to cover these varieties in the scope of licence.
- D)** Separate samples of each fibre with different properties (Filling/Non woven, Low Pill, Medium Tenacity, High Tenacity(HT), Super High Tenacity(SHT), High tenacity(Dope Dyed), Spunlacefibres) shall be drawn and tested to cover these varieties in the scope of licence.
- E)** Separate samples of each fibre based on lustre i.e. Full Dull (FD), Semi Dull (SD)/Semi Dull Optically Bright (SDOB), Super Bright (SBRT) shall be drawn and tested. However, If Semi Dull (SD) is tested Semi Dull Optically Bright (SDOB) may be covered and vice versa. If Bright (BRT) is tested Optically white(OW) may be covered and vice versa
- F)** Separate Samples of Virgin/Recycled fibre, High Shrinkage, Siliconized, Sheet form, Hollow, Flame retardant, Anti - microbial, Ultra violet light resistant, With colour fastness to rubbing and with colour fastness to perspiration (acidic and alkaline)PSF shall be tested to cover these special varieties in the scope of licence.
- G)** In order to cover ECO mark in the scope of licence, sample of each variety intended to be covered in the licence with ECO mark shall also be tested for the additional requirements for ECO mark.
- 2)** The firm shall declare the types of PSF intended to be covered within the scope of their licence. The scope of the Licence may be restricted based on the Manufacturing capability and Testing facilities of the manufacturer.
- 3)** During the operation of the Licence, BO shall ensure that all the Varieties covered in the Licence are tested in rotation to the extent possible.

Annex B
List of Test Equipment

Major Test Equipments required to test as per Indian Standard

Sl. No.	Tests Used In With Clause Reference	Test Equipment/Chemical
1	Identification And Description. Cl 5.1	Microscopic and dissolution test given in IS 667: Compound Microscope (100X-500X), Dissecting Needles, glass slides, cover glasses, and cross sectioning device and laboratory reagents as per IS 667 or Staining Test as per IS 667: Mixture of dyestuffs (e.g. Shirlastain A, Detex, Fibre Stain etc.), Known Dyed Samples or Determination of Melting Temperature as per Annex H of IS 16481: Differential Scanning Colorimeter (DSC), Balance, capable of weighing to $\pm 10 \mu\text{g}$
2	Mean linear density, Cl 6.1 Table 3	- Conditioning Chamber - Weighing Balance(L.C.-0.1mg) - Drying Oven(>110°C,L.C.1°C) - Desiccator with a suitable desiccant - Sealed Containers - Wrap reel
3	Cut length, Cl 6.1 Table 3	Method A-1 (oiled plate method) -Transparent Glass Plate - 25 cm x 15 cm approx. -Liquid paraffin or any other suitable oil -Piece of velvet of black or contrasting colour - Pair of tweezers -Scale graduated to 1 mm -Weighing balance Method A-2 (Cello Tape method) -Transparent Cello Tape -Scissors or blade -Table with contrasting colour surface -Scale graduated in millimeters Method B (Array Method) -Staple Fibre Sorter and Accessories -Velvet Plush -Pair of Tweezers

4	Average elongation at break , CI 6.1 Table 3	Tensile Strength Testing Machine with adjustable clamps, capable of operating at various constant rates of extension between at least 5 mm/min and 20 mm/min and meeting the requirements as per IS 235 Distilled or deionized water to which has been added a nonionic wetting agent Thermometer
5	Average tenacity, CI 6.1 Table 3	-do-
6	Hollowness, (For hollow fibres only) , CI 6.1 Table 3	Optical/Polarising Microscope, with proper Magnification - PC with Leica Software and Interface with Microscope and Camera - Metallic Slides, with slot for cross section preparation - Sharp Razor Blades -
7	Crimp removal, (For filling and/or nonwoven fibres only), CI 6.1 Table 3	Crimp Balance or equivalent crimp measuring equipment, Forceps, Velvet Board, Pretension weights, supplementary weights, Facility for proper lamination, Magnifying glass, Conditioning/Humiditychamber, Vernier Calliper, Crimp Removal Load(50mg/Den), paper gum tag, tweezer, contrasting background, Micrometer(LC-0.01mm), Stop watch.
8	Sinking time (For spun lace fibres only) , CI 6.1 Table 3	Stop Watch, Mettler Weighing Balance, Forceps, Beaker- 500ml, Air Blender, Distilled Water
9	Moisture regain, CI 6.1 Table 4	Precision Balance(L.C ... 0.1mg), Stainless Steel Vessels, Hot Air Oven Capable of maintaining 110+/-5 deg C, Forceps, Wrap reel, Conditioning Chamber
10	Isophthalic acid (IPA) content, CI 6.1 Table 4	PPE's like safety goggles, apron, surgical hand gloves, Gas chromatograph, capillary column Dispensette or pipette, Volumetric Flask, Beaker, Funnel, 50ml flask, Heating Mantle, AR grade Dimethyl Isophthalate, Benzyl Alcohol, Chloroform, Isopropyl Titrate, Dimethyl Suberate
11	Phosphorus content, (For fire retardant fibres only) CI 6.1 Table 4	Sulphuric Acid -250ml and 2000ml Beaker - Demineralized Water - 1000ml flask - Ammonium Molybdate -100ml, 500ml and 100ml Volumetric Flask - Hydroquinone - Sodium Sulphite - Zinc Oxide - Whatman Filter Paper No. 1 - Di-sodium Hydrogen Ortho Phosphate Dihydrate - Weighing Balance(LC- 0.1mg) - Hot Plate - Silica Crucible - Muffle Furnace, 600 deg C - Pipettes-10ml and 05ml - UV Visible Spectro-photometer- Silica Cells, 40mm - Silica Dishes, 7cm to 8cm dia- tongs - Watch Glass, 8 to 10 cm dia - Measuring Cylinders, 25ml and 50ml
12	Ultraviolet resistance, 500 h Percent retained strength (For UV resistant fibres only) CI 6.1 Table 4	Fluorescent UV Lamp-B (see IS 7903), Tensile Testing Machine
13	Water soluble matter, CI 6.1 Table 4	- Flat-Bottom Flasks, of suitable capacity with a glass stopper incorporating a stop-cock. (NOTE – The flasks that are used for the preparation of the extract should not be used

		for any other purpose) - Water Cooled Condensers - Hot Air Oven - Weighing Balance, with a resolution of 0.1 mg - Distilled Water, conforming to IS 1070.
14	Anti-microbial activity value CI 6.1 Table 4	Spectrophotometer, Incubator, Water baths, Mixer, Stomacher, Clean bench, Washing machine, Humidity chamber, Luminescence photometer, Printing apparatus, Refrigerator, Freezers, Balance, Filtering apparatus, Pipette, Vials, 30 ml glass bottles, Petri dishes, Glass rod, Anti-bumping granules (glass beads), Erlenmeyer flask, Cutting template, Disposable plastic bags, Tweezers, Stainless-steel cylinder, Metal wire basket, Aluminium foil, Reciprocal incubation shaker, Autoclave, Water, Tryptone soya broth (TSB), Tryptone soya agar (TSA), Agar for transfer, Nutrient broth (NB), Peptone salt solution, Physiological saline, SCDLP medium, Dilution buffer for shake-out bacterial suspension, Neutralizing solution, Enumeration agar (EA), Agar for printing, Cryoprotective solution for bacterial species,
		Stock solution of ATP standard reagent, Buffer solution for ATP luminescent reagent, ATP luminescent reagent, ATP extracting reagent, ATP eliminating reagent, SCDLP or other medium for preparing ATP reference solution, Shake-out physiological saline, Strains— <i>Staphylococcus aureus</i> — <i>Klebsiella pneumoniae</i> . By any of the following methods:- Absorption Method, Transfer Method or Printing Method.
15	Silicon content CI 6.1 Table 4	XRF unit with a) X-ray fluorescence spectrometer (XRF); b) P- 10 carrier gas; c) Sample pellet; and d) Standard sample for calibration e) Carver hydraulic press/pellet press Analytical balance - capable of weighing to an accuracy of 0.1 mg Muffle Furnace - capable of maintaining temperature up to 700°C Tongs Heat Resistant Gloves Bunsen Burner Silica Triangle and Tripod PPEs like safety goggles, nose mask and apron Crucible

16	Colour strength with reference to standard shade, percent (For dope dyed fibres only) CI 6.1 Table 4	a) Spectrophotometer of appropriate make/model. b) PC, Software. c) White and black calibration plates. d) Apertures - Small, medium and large. e) Black velvet board. f) Tissue paper
17	Colour difference with reference to standard shade, measured as $\Delta E1$, Max (For dope dyed fibres only) CI 6.1 Table 4	-do-
18	L Colour value CI 6.1 Table 4	a) Colorimeter/spectrophotometer instrument; b) Square standard tiles (white, blue, yellow, pink, grey and green) with the instruments; c) Working standard white square plate; d) Pressure device or any other suitable device to keep the sample steady; e) Source of air at $2.10 \text{ kg/cm}^2 \pm 0.35 \text{ kg/cm}^2$ (regulated); f) Sample holder with glass cover plate and clear plastic disc; and g) Air blender.
19	Whiteness index (for stay white fibres only) CI 6.1 Table 4	-do-
20	Resistance to ageing (fibres in sheet form at 40°C for 168 h), percent retained strength of original CI 6.1 Table 4	Oven Method:- Hot air oven, steel scale, thermometer. Oxygen Pressure Method:- Oxygen Pressure chamber with a safety valve and a pressure gauge, oxygen cylinder.
21	Dry heat (hot air) shrinkage at 180°C , for 30 min, percent, Min (for high shrinkage fibres only) CI 6.1 Table 4	Single Fibre Shrinkage Apparatus, Pretension Weight, Velvet Board, Lamp, Forceps, Oven, ($180 \pm 2^\circ\text{C}$), hot air, with temperature control, Transfer Rod, with hook for handling of cylinder, Metal Rod, with hook for lifting hot cylinder with sample, Heat Resistant Hand Gloves K-2.10 Timer, with alarm.
22	Lustre/Brightness, CI 6.3, Table 5	Analytical Balance – Capable of weighing to 0.1 mg., Ultraviolet Visible Spectrophotometer, Silica Gel, Flask Volumetric – 100 ml, 500 ml, 1 000 ml., Muffle Furnace – Capable of maintaining temperature 700°C to 800°C and accepting 7 to 8 cm dishes, Hot Plate – Capable of being heated to $250\text{-}300^\circ\text{C}$., Measuring Cylinder – 10 to 50 ml capacity, Glass Beaker – 250 ml capacity Reagents: Hydrogen Peroxide, Sulfuric Acid, Nitric Acid, Ammonium Sulphate, TiO_2

23	Colour Fastness Properties, Table 6	<u>For colour fastness to light (Daylight) as per IS/ISO 105-B01 : 2014</u> • Exposure rack • Opaque cardboard or other thin opaque material • Grey scale for assessing change in colour, in accordance with ISO 105-A02. • When requested, instruments for determining climatological data during the exposure, operated inside the cabinet and in the immediate area of the exposure cabinets. • Reference materials For colour fastness to light (artificial light)
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		<u>as per IS/ISO 105-B02 : 2014</u> • Apparatus consisting of a Light source - a xenon arc lamp of correlated colour temperature 5500 K to 6500 K, the size of which will depend on the type of apparatus used and other specifications as given in the standard • Temperature and humidity sensors • Covers of thin opaque material, for example high-grade steel, thin sheet aluminium or cardboard covered with aluminium foil • Colour matching lamps, in accordance with CIE Publication No. 51 • Assessment cabinet, complying with ISO 105-A01. • Sample mounting card, free of optical or fluorescent brightening agent. • Assessment mask, complying with ISO 105-A01. In order to obtain reliable test results using ISO 105-A02, the test specimen(s) shall be masked with a material that is identical in colour to the sleeve that is used to mask the grey scale • Grey scale for assessing change in colour, complying with ISO 105-A02 • Reference materials <u>For Colour Fastness to perspiration (optional) as per IS/ISO 105-E04:2008(superseding IS 971)</u> • Test Devices as per Clause 4.1 of IS/ISO 105-E04 • Oven maintained at $(37 \pm 2)^{\circ}\text{C}$ • Alkaline Solution as per Clause 4.3 of IS/ISO 105-E04 • Acid Solution as per Clause 4.4 of IS/ISO 105-E04 • Adjacent Fabrics as per Clause 4.5 of IS/ISO 105-E04 • Non-Dyeable Fabric • Grey Scale for Assessing Change in Colour & Staining • Spectro photometer or Colorimeter <u>For Colour Fastness to Rubbing (optional) as per IS/ISO 105-X12:2016 superseding IS 766</u> • Suitable Testing Device as per Clause 4.1 of IS/ISO 105 X12 • Cotton Rubbing Cloth • Soft-backwater proof abrasive paper • Grey Scale for Staining
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24	Commercial Mass, Cl 6.5	- Balance/Weighing Instruments(LC-.1mg), Air tight vessels/Desiccator, Hot air oven/Ventilated air oven, Laboratory reagents for Cleaning Specimens.
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The above list is indicative only and may not be treated as exhaustive.

ANNEX C

Scheme of Inspection And Testing

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (asper the requirement given in column 2 of Table 1) and staffed, where different tests given in the specifications shall be carried out in accordance with the methods given in the specification.

The manufacturer shall prepare and implement a calibration plan for the test equipments.

2. TEST RECORDS - The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. PACKING AND MARKING - The Standard Mark, as given in the Schedule of the licence, shall be tagged/labelled on each package/bale of Polyester Staple Fibres, provided always that the product thus marked conforms to each requirement of the specification.

3.1 The polyester staple fibres (PSF) shall be packed in the form of bales of 275 kg or as required by the buyer, with woven fabric stitched at sides, top and bottom and properly strapped using polypropylene/PET straps to ensure that the contents are safe from weather, dirt, dust and water etc.

3.2 Each bale of polyester staple fibres (PSF) shall be marked with indelible ink, the following information:

- a) Name and description of the material (see 4.6 and 5.1);
- b) Gross or net mass of each bale of fibres;
- c) Manufacturer's name, address and trade-mark (if available);
- d) Lot/batch/merge number;
- e) ~~Month and year of manufacture; —~~
- f) Any other information required by the law in force
- g) BIS Licence No. CM/L --.
- h) BIS website details i.e. - For details of BIS certification please visit www.bis.gov.in.

Note: "The yarn manufacturer shall mark on the pallets/cartons whether the yarn is Disperse Dyeable/Conventional Dyeable (COD)/Stock Dyeable(STD)/Easy Dyeable (ED)/Cationic Dyeable or Easy Dyeable Cationic Dyeable (EDCD) for the guidance of the multifold yarn/fabric manufacturers"

4. CONTROL UNIT – For the purpose of this scheme, a control-unit is defined as the entire quantity of Polyester Staple Fibres, of each type and variety manufactured under similar conditions in a single day.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

6. REJECTIONS– Non-conforming material shall be clearly identified and labeled as "rejection" and it shall be segregated and stored separately by manufacturers in India. Such rejected material shall be disposed of suitably by manufacturers in India in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016 and the applicable Quality Control Order. Appropriate records of such rejection shall be maintained

TABLE 1 : LEVELS OF CONTROL

(1)				(2)	(3)		
Test Details				Test equipment requirement R:required(or)S : Sub- contracting permitted	Levels of Control		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
4.1.1, 4.1.2, 4.2, 4.3	Cross Section, Cross Sectional Area, Multi Component Fibres	4.1.1, 4.1.2, 4.2, 4.3	IS 17263	R	01	Each Control Unit	Samples of each type and variety to be drawn and tested.
5	Identification And Description		Annex H of IS 16481 and IS 667	S	06 Bobbins	Each month	In addition, each consignment of raw material shall be accompanied by test certificate of supplier
6.1, Table 3	Physical Requirements of Polyester Staple Fibres						
i)	Mean linear density		IS 234	R	03	Each control unit	Samples of each type and variety to be drawn and tested.
ii)	Cut length		IS 10014 (Part 1)	R	03	Each control unit	-do-
iii)	Average elongation at break		IS 235	R	03	Each control unit	-do-

iv)	Average tenacity		IS 235	R	03	Each control unit	Samples of each type and variety to be drawn and tested
v)	Hollowness, percent, (For hollow fibres only)	Annex B	IS 17265	R	03	Each control unit	-do-
vi)	Crimp removal, (For filling and/or nonwoven fibres only)	Annex C	IS 17265	R	03	Each control unit	-do-
vii)	Sinking time, (For spun lace fibres only)	Annex D	IS 17265	R	03	Each control unit	-do-
6.1, Table 4	Chemical and Other Requirements of Polyester Staple Fibres						
i	Moisture regain	Annex E	IS 17265	R	03	Each control unit	Samples of each type and variety to be drawn and tested.
ii)	Isophthalic acid (IPA) content	Annex C	IS 16481	S	06 Bobbins	Each month	-do-
iii)	Phosphorus content	Annex F	IS 17265	R	03	Each control unit	-do-

iv)	Ultraviolet resistance, 500 h Percent retained strength, (For UV resistant fibres only)	Annex F	IS 16481	S	03	Once a month	-do-
v)	Water soluble matter		IS 3456	R	03	Each control unit	-do-
vi)	Anti-microbial activity value, Min (For anti- microbial fibres only)		IS/ISO 20743	S	03	Once in three months	-do-
vii)	Silicon content percent, Min (For siliconized fibres only)	Annex G	IS 17265	S	03	Each month	-do-
viii)	Colour strength with reference to standard shade, percent (For dope dyed fibres only)	Annex H	IS 17265	R	06	Each control unit	Either of the requirements indicated at viii) and ix) needs to be complied with
ix)	Colour difference with reference to standard shade, measured as $\Delta E 1$, Max (For dope dyed fibres only)	Annex H	IS 17265	R	06	Each control unit	Either of the requirements indicated at viii) and ix) needs to be complied with
x)	L Colour value	Annex J	IS 17265	R	03	Each control unit	Samples of each type and variety to be drawn and tested

xi)	Whiteness index (for stay white fibres only)	Annex J	IS 17265	R	03	Each control unit	-do-
xii)	Resistance to ageing (fibres in sheet form at 40°C for 168 h), percent retained strength of original, Min		IS 7016 (Part 8)	R	03	Once a month	-do-
xiii)	Dry heat (hot air) shrinkage at 180°C, for 30 min, percent, Min (for high shrinkage fibres only)		Annex K	R	03	Each control unit	-do-
6.2	Freedom from major defects	6.2	IS 17623	R	03	Each control unit	-do-
6.3	Lustre/Brightness	6.3	IS 17263	S	06	Once in a month	-do-
6.4, Table 6	Colour Fastness Properties						
i)	Light a) Change in colour		IS/ISO 105-B01 or IS/ISO 105-B02	S	03	Once a year	Samples of each type and variety to be drawn and tested
ii)	Washing, Test 2 a) Change in colour b) Staining		IS/ISO 105-C10	R	03	Once a week	-do-
iii)	Rubbing (optional) a) Dry b) Wet		IS/ISO 105-X12	R	As agreed between purchaser and supplier		-do-

iv)	Perspiration (acidic and alkaline) (optional) a) Change in colour b) Staining		IS/ISO 105-E04	R	As agreed between purchaser and supplier		-do-
					Once a week		
6.5	Commercial Mass	6.5	IS 17263:2022	R	01 bobbin per position	Each control unit	-do-
6.6, Table 7	Additional Requirements for ECO-Mark (Optional)						
i)	Free and releasable formaldehyde		IS 14563 (Part 1) and IS 14563 (Part 2)	S	01	Once a year	Only for eco marked material
ii)	Extractable heavy metals by artificial Acidic sweat/saliva,		Annex A of IS 15651	S	01	Once a year	Only for eco marked material
iii)	Pentachlorophenol		Annex B of IS 15651	S	01	Once a year	Only for eco marked material
iv)	Pesticides (Sum parameter)		Annex D of IS 15651	S	01	Once a year	Only for eco marked material
v)	Banned pesticides		Annex D of IS 15651	S	01	Once a year	Only for eco marked material
vi)	Banned azo colourants (arylamines) (For dyed fibres only) (Sum		IS 15570	S	01	Once a year	Only for eco marked material

	parameters)						
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Note-1:Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empaneled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/ batch/ lot and submit his own levels of control in column 3 with proper justification for approval to BO head.