



**PRODUCT MANUAL FOR
Textiles – Viscose Staple Fibres
ACCORDING TO IS 17266: 2019**

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.	Product	:	IS : 17266 : 2019
	Title	:	Textiles – Viscose Staple Fibres -Specification
	No. of Amendments	:	0
2.	Sampling Guidelines:		
a)	Raw material	:	<u>Nil</u>
b)	Grouping guidelines	:	NA - Sample of each variety namely : Grey, Spun Shades, Modal, Lyocell should be tested to cover that specific variety.
c)	Sample Size	:	2 Kg
3.	List of Test Equipment	:	Please refer ANNEX – <u>A</u>
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – <u>B</u>
5.	Possible tests in a day :		
	Spinning Faults, Whiteness (Berger), Oil pickup, pH, Identification of fibre, Freedom from Defects (Complete testing requires 3 days) – Being processed on FT Basis		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 17266: 2019with the following scope:		
	Name of the product	Viscose Staple Fibres	
	Variety	Grey/Spun Shades/Lyocell/Modal	

ANNEX A

List of Test Equipment

SI. No.	Tests used in with Clause Reference	Test Equipment
1.	4.1 Identification	Compound microscope (100 – 500 x) Weighing Balance (0- 1 kg/ 0.1 g) Dissecting needles Cross sectioning device Glass slides Cover Glasses Distilled water Phloroglucinol Concentrated HCl Benzene Methanol Ethanol Shirlastain A Filter paper Zinc Chloride Potassium Iodide Iodine Separating funnels Dark Bottle Hot plate (With temperature controller) Detex Neocarmine W Texchrome 80 % H ₂ SO ₄

		Conc HNO ₃ Acetone 90% Phenol/ M cresol Conc . HCl Formic acid Copper Sulphate Ice/Refrigerator Ammonia 76 °TW Caustic soda Pipettes Hydrometer Dessicator Beakers Measuring Cylinders Forceps Micro-Burner Glass rods Light source Black Background
2	4.2 i) Denier Method 1 – Cut Fibre/ Gravimetric Method	Weighing Balance (as above) Level ground/Table of dimension greater than 1x1 m or 1x2m Metallic framework with 25 or 50 subsquares Cutter Forceps Vernier Callipers

		<p>Black Velvet pad</p> <p>Microbalance (LC 5 micro gram)</p> <p>Steel comb (12needles/cm)</p> <p>Magnifying glass</p> <p>Glass slide</p> <p>Provision to hold sample under tension on a rigid base</p> <p>Vibroscope having the following accuracy:</p> <p>a) Applied tensioning force shall be within the range of ± 0.6 percent of the specified value.</p> <p>b) Error in reading of resonance frequency measured or applied shall not exceed ± 0.6 percent.</p> <p>c) Error in reading of vibration length of the fibre shall not exceed ± 0.6 percent.</p> <p>Cutter</p> <p>Forceps</p> <p>Vernier Callipers</p> <p>Black Velvet pad</p> <p>Microbalance (L C – 5 micro gram)</p> <p>Steel comb (12needles/cm)</p> <p>Magnifying glass</p> <p>Glass slide</p> <p>Provision to hold sample under tension on a rigid base</p>
3	4.2 ii) Conditional Tenacity	<p>Tensile testing machine</p> <p>(Constant rate of Extension type or loading type)</p> <p>Tabs</p> <p>Fibre clips</p> <p>Jig</p>

		Adhesive/Cement Distilled water (with non-ionic wetting agent making up 0.1 concentration)
4	4.2 iii) Whiteness (berger)	Reflectometer (having characteristics as per Annex A of IS 1060 Part 4/Sec4) Non fluorescent reference standards and its working standards Black Cavity Distilled water Detergent Brush Dessicator
5	4.2 iv) Length	Velvet pad Tweezers Glass sheet Liquid Paraffin/ suitable oil Vernier/ Measuring tape of range more than the maximum length of fibre Balance
6	4.2 v) Spinning faults	Visual inspection
7	4.2 vi) Shirley Faults	Weighing balance L C 10 mg Shirley Analyser
8	4.2 vii) Moisture	Weighing balance Hot air Oven (110/5 C) Forceps Stainless steel vessels
9	4.2 viii) Oil pick up	Balance Soxhlet apparatus Conical flasks

		Stainless steel vessels Bowls Forceps Petroleum Ether Stop watch Hot air oven Dessciator
10	4.2 ix) pH	Distilled water /Distillation assembly pH meter potassium permanganate Sodium hydroxide Sulphuric acid Potassium Chloride (if deionized water not used) pH buffer solutions (4,7 and/or 9 recommended) Stoppered Glass/PP bottles Mechanical Shaker Beakers(150 ml) Rods Balance (10 mg) 1 L Volumetric Flasks (A grade)
11	4.3 Freedom from defects	UV light Packing Table
12	4.5 Commercial Mass	Balance Air tight Vessels Hot air oven/ventilated air oven
13	General lab conditions Pre conditioning requirements	AC Humidifier

	Conditioning requirements	Dehumidifier Hygrometer Thermometer Hot Air Oven/ Humidity chamber with provisions to control temperature and Relative Humidity

The above list is indicative only and may not be treated as exhaustive.

ANNEX B

Scheme of Inspection And Testing

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

1.1 The manufacturer shall prepare 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 marked on each bale of viscose staple fibres, provided always that the product thus marked conforms to every requirements of the specification.

3.1 Packing and marking shall be done as per the provisions of the Indian Standard. In addition, the following details shall be marked on each bale:-

a) BIS Licence No. CM/L-----.

b) BIS website details i.e. –“For details of BIS certification please visit www.bis.gov.in.

4. CONTROL UNIT – For the purpose of this scheme, a control-unit is defined as the entire quantity of viscose staple fibre, of one variety processed 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.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

6. REJECTIONS – Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

Such material shall in no case be stored together with that conforming to the specification

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	Identification	-	IS 667	R	1	Each control unit	Samples of each variety to be drawn in rotation
4.2	Denier	-	IS 234	R	1	Each Control Unit	-do-
4.2	Conditional Tenacity	-	IS 235	R	1	Each control unit	-do-
4.2	Whiteness (berger)	-	IS 1060 (Part 4/Sec 4)	R	1	Each Control Unit	-do-
4.2	Length	-	IS 4807	R	1	Each control unit	-do-
4.2	Spinning Faults	-	IS 17266	R	1	Each Control Unit	-do-
4.2	Shirley faults	-	IS 4871	R	1	Each control unit	-do-
4.2	Moisture	Annex C	IS 17266	R	1	Each Control Unit	-do-
4.2	Oil pickup	Annex B	IS 17266	R	1	Each control unit	-do-
4.2	pH	-	IS 1390	R	1	Each Control Unit	-do-
4.3	Freedom from defects	4.3	IS 17266	R	1	Every 4 hour	-do-
4.5	Commercial Mass	4.5	IS 17266 -IS 6741 (Parts 1,2 and 3)	R	1	Each control Unit	-do-

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.