

**ITEM SPECIFICATION ITM CD :2101614056**

ITEM CODE :-	<input type="text" value="2101614056"/>	<input type="button" value="submit"/>
--------------	---	---------------------------------------

ITM CODE	DETAILED SPECIFICATION
2101614056	MESH FABRIC-100% POLYESTER FABRIC WIDTH 148CM AS PER IAFS 01036 : 2025-OCT Appendix - E
04	METRE

IAFS 01036 {Shorts Gymnastics (with piping)} : 2025 (Oct)



**KNITTED MESH ( INNER) FABRIC**

<b>Blend Composition of the Fabric</b>	<b>100 % polyester</b> <i>(Can be made from recycled or virgin polyester)</i>	IS	IS 3416 (Part 1) : 1988 <i>(based upon dry mass)</i> (RA 2017) and IS 667 : 1981 or AATCC 20 : 2011, AATCC 20 A : 2012 OR ISO 1833
--	---	----	--

## IAFS 01036 {Shorts Gymnastics (with piping)} : 2025 (Oct)



PROPERTY / PARAMETER	REQUIRED VALUE	TEST METHOD	
		GOV STD	STD NO
a.	b.	c.	d.
<p>Type of yarns to be used</p> <p>1. Course-wise</p> <p>2. Wales-wise</p>	<p>1. Course-wise :</p> <p>- Polyester, <i>continuous multifilament Fully Drawn i.e Fully Oriented</i></p> <p>2. Wales wise :</p> <p>- Polyester, <i>continuous multifilament Fully Drawn i.e Fully Oriented</i></p>	Visual	Visually by the NABL Lab
<p>Main classification of the knit (to be used while knitting of fabric)</p>	<p>Warp Knitted ( for durability &amp; strength). Moisture wicking finished, breathable, suitable for sportswear lining</p> <p>Note: The feel and finish of the mesh fabric should be SOFT</p>	Visual	SP 45:1988 (Handbook on glossary of terms issued by BIS), To be checked visually by the NABL Lab
<p>Geometry of mesh hole</p>	<p>Circular or Hexagonal (Any of these would be acceptable)</p>	Visual	Visual by the O/o CQAO as well as by the NABL Lab
<p>Mass of the fabric per unit area (i.e. in GSM or g/m<sup>2</sup>)</p>	<p>55 GSM (minimum) 70 GSM ( maximum) i.e (55 – 70) GSM</p>	IS/ ISO	IS 1964: 2001 (RA 2022) OR ISO 3801 : 1977 Option 5
<p>Bursting Strength of the Fabric</p>	<p>800 kPa (Min) i.e 8 kgf/cm<sup>2</sup> (Min.)</p>	ISO / AST M	ISO : 2960 / ASTM D 3786 / ASTM  OR ISO 13938-1 : 2019

## IAFS 01036 {Shorts Gymnastics (with piping)} : 2025 (Oct)



PROPERTY / PARAMETER	REQUIRED VALUE	TEST METHOD	
		GOV STD	STD NO
a.	b.	c.	d.
Number of holes per square inch of the mesh fabric (Construction of the mesh)	Number of holes per square inch : 170 (Minimum)	IS/ISO	IS1963 : 1981 (RA 2023)  OR ISO 7211-2 : 1984
Abrasion resistance (Martindale) – After 5 cycles of pre-treatment  (The pre-treatment involves washing as per ISO 6330:7N (75 °C): 2012 followed by Tumble dry after each wash)	1. No hole formation should be there after 35,000 cycles  2. Shade change : 4 or better	ISO	ISO 12947-2 : 2016 Load 12 kPa
Type of Dye (Dope, Fiber / Filament, Yarn, Fabric)  (* Note : The quality of the dye and the process quality control during dyeing will be evaluated by checking the compliance with all colour fastness properties' values enumerated below in this Appendix 'E')	Any type of Dye , which ensures meeting of ALL colour fastness properties as enumerated BELOW in this Appendix 'E'	---	---
Nature of Dye  (* Note : The quality of the dye and the process quality control during dyeing will be	Any type of Dye ( inclusive of DISPERSE dyeing of the fabric) , which ensures meeting of ALL colour fastness	---	---

## IAFS 01036 {Shorts Gymnastics (with piping)} : 2025 (Oct)



PROPERTY / PARAMETER	REQUIRED VALUE	TEST METHOD	
		GOV STD	STD NO
a.	b.	c.	d.
<i>evaluated by checking the compliance with all colour fastness properties' values enumerated below in this Appendix 'E')</i>	<b>properties as enumerated BELOW in this Appendix 'E'</b>		
<b>Fabric's Colour fastness to light (Blue Wool rating)</b>	<b>5 or better</b>	IS/ ISO	IS 2454 : 1985 / ISO 105 B 02 : 2014
<b>Fabric's Colour fastness to washing (after 05 repeated washing / drying cycles at 38 °C to 44 °C)</b>	<b>1. Change in Shade : 4-5 or better</b> <b>2. Staining on</b> 2.1. Acetate: <b>4-5 or better</b> 2.2. Cotton: <b>4-5 or better</b> 2.3. Nylon : <b>4-5 or better</b> 2.4. Polyester: <b>4-5 or better</b> <b>better</b> 2.5. Acrylic: <b>4-5 or better</b> 2.6. Wool : <b>4-5 or better</b>	IS/ ISO	IS/ISO 105 C 10 : 2006 Test A1 (RA 2021)
<b>Fabric's Colour fastness to perspiration (to be checked both in acidic and alkaline simulated conditions)</b>	<b>Acidic</b>  <b>1. Change in Shade : 4-5 or better</b> <b>2. Staining on</b> 2.1. Acetate: <b>4-5 or better</b> 2.2. Cotton: <b>4-5 or better</b> 2.3. Nylon : <b>4-5 or better</b> 2.4. Polyester: <b>4-5 or better</b> <b>better</b> 2.5. Acrylic: <b>4-5 or better</b> 2.6. Wool : <b>4-5 or better</b>	ISO	ISO 105 E 04 : 2008 (RA 2019) <b>(Note : This standard has replaced IS 971 : 1983)</b>

## IAFS 01036 {Shorts Gymnastics (with piping)} : 2025 (Oct)



PROPERTY / PARAMETER	REQUIRED VALUE	TEST METHOD	
		GOV STD	STD NO
a.	b.	c.	d.
	<b>Alkaline</b>  1. Change in Shade : 4-5 or better 2. Staining on 2.1. Acetate: 4-5 or better 2.2. Cotton: 4-5 or better 2.3. Nylon : 4-5 or better 2.4. Polyester: 4-5 or better 2.5. Acrylic: 4-5 or better 2.6. Wool : 4-5 or better		
<b>Fabric's Colour fastness to perspiration &amp; light (both to be checked simultaneously)</b>	1. Acidic: 4-5 or better 2. Alkaline : 4-5 or better	ISO	ISO 105 B 07 : 2009
<b>Fabric's Colour fastness to rubbing</b>	1. Dry : 4-5 or better 2. Wet : 4-5 or better	IS/ ISO	IS 766 : 1988 / ISO 105 X12 : 2016
<b>Colour of the fabric</b>	<b>Visually matching with the PANTONE Shade Card No. 19-3923 TCX (Navy Blazer) or Visually matching with the Base Outer Fabric</b>	Visual	Visual by the O/o CQAO as well as by the Lab at the time of BPC as well as the time of Bulk production inspection lot