



INDIAN TECHNICAL TEXTILE ASSOCIATION

Circular No: 43/2021-22

Date: 27.12.2021

SUBJECT: INVITING TECHNICAL INPUTS ON PARASAILING FABRICS FOR BIS STANDARD DEVELOPMENT

Dear ITTA Members,

Greetings from ITTA!!!

Please find enclosed the **MOM of the 4th meeting of Sportech Applications Sectional Committee, TXD 37 of BIS.**

1. We bring your kind attention to the **Point no-5.1.** in MOM, gist of which is given below --

BIS has formed a Panel from the sub-committee members from ITTA, Kusumgar Corp & JCT. The Panel has to cover all the varieties of Parasailing fabric into one standard. ED-ITTA will be the convener of the panel & will coordinate the activity. Therefore, we request you to give your inputs on the following -

- i) Give your technical inputs on Parasailing fabrics - Specifications of fabric/ made-up, etc.
- ii) If any member is interested & can contribute to this area, Panel may co-opt them including user organizations on the panel. Please write to us.

2. New Indian Standards to be developed for Sportech products - Please email us your suggestions on both Product Specification & Test methods (for different applications) to be developed by BIS as per the industry needs.

Kindly email your comments/ views to ITTA Email ID - officeed@ittaindia.org before 4th January 2022.

Best Regards,

Ruchita Gupta

Assistant Manager (Technical)

Indian Technical Textile Association

314, 3rd Floor, MIDAS, SAHAR PLAZA, Andheri-Kurla Road,

J.B. Nagar, Andheri-East, Mumbai - 400059.
Tel: +91 22 49635711; Mob: (O) +91 9769464616
Email: officeed@ittaindia.org; Website: www.ittaindia.org

----- Forwarded message -----

From: **Textiles BIS** <txd@bis.gov.in>

Date: Fri, Dec 24, 2021 at 5:42 PM

Subject: Minutes for 4th Meeting of Technical Textiles for Sportech Applications Sectional Committee, TXD 37

To:

भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार

Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India

मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली – 110 002

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi – 110002

दूरभाष 23231282 ईमेल: txd@bis.gov.in

Phones 23230131 email: textiles.bis@gmail.com
23233375
23239402

कार्यवृत्त

खेलकूद (स्पोर्टटेक) अनुप्रयोगो के लिये तकनीकी वस्त्रादि विषय समिति, टी एक्स डी 37 की चौथी बैठक

टी एक्स डी 37 के अध्यक्ष एवं सभी सदस्य

महोदय,

खेलकूद (स्पोर्टटेक) अनुप्रयोगो के लिये तकनीकी वस्त्रादि विषय समिति, टी एक्स डी 37 की चौथी बैठक का कार्यवृत्त संलग्न है जो कि विषय समिति के अध्यक्ष द्वारा विधिवत अनुमोदित है।

सम्मतियाँ भेजने की अंतिम तिथि – **31-12-2021**

अभिलेखन की परिशुद्धता तक सीमित सम्मतियाँ, यदि कोई हो तो अधोहस्ताक्षरी को वरीयतः सम्मतियाँ भेजने की अंतिम तिथि तक भेज दे। इस तिथि तक यदि कोई उत्तर प्राप्त नहीं होता है तो, हमें यथाअभिलेखित कार्यवृत्त का अनुमोदन मान लेने की अनुमति दी जाय।

धन्यवाद ।

संलग्न : उपरलिखित

भवदीय,
(मयूर कटियार)
वैज्ञानिक बी

MINUTES

Technical Textiles for Sportech Applications Sectional Committee, TXD 37

Chairperson and All Members of TXD 37

Dear Sir(s),

Please find enclosed the Minutes of the 4th Meeting of **Technical Textiles for Sportech Applications Sectional Committee, TXD 37**, duly approved by the Chairperson, Sectional Committee.

Last date for comments: **31 December 2021.**

Comments if any, confined to the accuracy of recording, may please be mailed to the undersigned preferably by the last date for comments. If no reply is received by this date, we may be permitted to presume your approval of the minutes as recorded.

Thanking you,

Encl: As above

Yours faithfully,
(Mayur Katiyar)
Scientist B

For BIS Use Only

BUREAU OF INDIAN STANDARDS

Draft MINUTES

**Technical Textiles for Sportech Applications Sectional Committee,
TXD 37**

4th Meeting

Date	Time	Venue
14 December 2021 (Tuesday)	1500 h	Through CISCO Web Ex

ATTENDEES:

- Dr (Smt) Mrinal Choudhari** **Wool Research Association, Thane**
(Chairperson)
- Shri A Prasad Archroma India Pvt. Ltd., Thane
- Shri Amol Thite BTRA, Mumbai
- Smt Sumi Sebastian CCRI, Kerela
- Dr Vijay Ramakrishnan Garware Technical Fibres Limited, Pune
- Dr T Senthilkumar ICAR- Central Institute for Research on Cotton
Technology, Mumbai
- Dr A Arputharaj – do –
- Shri Palash Paul Indian Jute Industries' Research Association, Kolkata
- Dr. Anup Rakshit ITTA, Mumbai
- Shri Khushwinder Dhillon JCT Pvt. Ltd, Phagwara
- Dr M K Talukdar Kusumgar Corporates Pvt Ltd, Mumbai
- Shri Ravi Singh SASMIRA, Mumbai
- Dr Karthikeyan K SGS, Chennai
- Shri R. Chandran Textile Committee EPQA Division, Mumbai
- Shri Devvert Ruhela WRA, Thane
- Dr. Suranjana Gangopadhyay VJTI, Mumbai

BIS DIRECTORATE GENERAL:

- Shri J.K. Gupta Scientist E & Head, Textiles
- Shri Mayur Katiyar Scientist B & Member Secretary
- Shri Sourabh Awasthi Young Professional (Textiles)

Item 0 WELCOME & INTRODUCTORY REMARKS

0.1 Shri J K Gupta, Head (Textiles) welcomed the Chairperson and all other members and urged for the active participation and to provide precise inputs on the agenda items. He also requested the members to extensively use standardization portal for effective and time bound communication.

0.2 Dr (Smt) Mrinal Choudhari, Chairperson, TXD 37 welcomed the members and invitees present in the meeting and thanked them for their contribution in the National Standardization effort in the area of Sportech.

Item 1 CONFIRMATION OF THE MINUTES OF THE PREVIOUS MEETING

1.1 In view of no comments received, the Committee CONFIRMED the minutes of the 3rd meeting of the Committee held on 16 April 2021 as circulated vide BISDG letter no. TXD 37/A 2.03 dated 16 April 2021.

Item 2 SCOPE AND COMPOSITION OF TXD 37

2.1 The Committee reviewed the present scope and composition as given in Annex 1 of the agenda and decided as under:

2.2.1 The Committee decided to co-opt the following organizations on the committee.

- a) JCT Pvt. Ltd. Phagwara will be represented by Shri Khuswinder Dhillon as principle member and Shri Arvinder Singh as alternate member.
- b) Western India Football Federation.
- c) Central Reserve Police Force.

Item 3 ISSUES ARISING OUT OF PREVIOUS MEETING OF TXD 37

3.1 The Committee NOTED the summary of actions taken on the various decisions of the 3rd meeting as given in Annex 2 of the agenda and decided as under:

For item 6.1 (a): The committee requested the representative of Garware Technical Fibres Limited, Pune to provide technical inputs for Sports Strings and Sports Ropes.

For item 6.1 (b): Member secretary informed the committee that for laminated tents IS 12989: 2016 “Camping tents (third revision)” and IS 10321: Part 1 to 3: 1982 “Specification for 50-kg tent” are already available on the subject. The committee decided to circulate these standards to the committee member for their scrutiny and to decide whether a new standard on laminated tents is required or not.

Item 4 DRAFT INDIAN STANDARDS FOR FINALIZATION

4.1 The committee scrutinized the following draft Indian Standards as given in **Annex 3** to the agenda along with the comments received on **DOC: TXD 37(16935) Textiles – Nylon fabrics for sleeping bags – Specification (first revision of IS 8991:1978)** from M/s Kusumgar Corporates Ltd. as given in **Annex 4** to the agenda. After detailed deliberations, the committee decided as under:

i) DOC: TXD 37(16934) Textiles – Nylon fabrics for inflatable equipment – Specification (first revision of IS 8430:1977)

The committee decided that the above draft standard be held to have been finalized for publication as Indian standard after incorporating the following changes along with editorial changes, if any:

- a) To incorporate test method and requirement for puncture resistance in consultation with Dr. M K Talukdar and Chairperson TXD 37.
- b) To incorporate the requirement for water proofness at 50 cm water column height for 60 min appropriately in the finalized draft. The requirement for this test shall be ‘No percolation of water through the fabric or wetting of the outer surface’ and test method shall be IS 7016 (Part 7).

ii) DOC: TXD 37(16935) Textiles – Nylon fabrics for sleeping bags – Specification (first revision of IS 8991:1978)

The committee decided that the above draft standard be held to have been finalized for publication as Indian standard after incorporating the following changes along with editorial changes, if any:

- a) Scope of the standard shall be modified to cover the requirements for inner layer, outer layer and carry bag fabric.
- b) Clause 3.1, sentence 1 – Substitute the following for the existing:
“3.1 Continuous filament nylon yarn shall be used in the manufacture of the cloth.”
- c) Clause 3.2, line 1 – Substitute ‘Plain with ripstop’ for ‘plain or ripstop’
- d) Table 1 – Substitute the following tables for the existing:

Table 1 Requirements of Nylon fabric for inner layer

S No.	Characteristics	Requirement	Method of Test, Ref to
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i)	Mass in grams per square metre	50±5	IS 1964
ii)	Tensile strength of the fabric, N, <i>Min</i> a) Warp b) Weft	700 400	IS 1969 (Part 1)
iii)	Tear strength, N, <i>Min</i> a) Warp b) Weft	80 70	IS 7016 Part 3 Method A1 (double tear)
iv)	Elongation at break, percent, <i>Min</i> a) Warp b) Weft	40 40	IS 1969 (Part 1)
v)	Colour fastness to light (dyed fabrics only), change in colour	5 or better	IS/ISO 105-B02
vi)	Colour fastness to washing: Test C(3) 1) Change in colour 2) Staining of adjacent fabric	4 or better 4 or better	IS/ISO 105-C10
vii)	Colour fastness to perspiration	4 or better	IS/ISO 105-E04
viii)	Breathability (water vapour resistance), m ² .Pa/W, <i>Min</i>	To be provided by JCT after getting test results from NITRA	IS 17376
ix)	Dimensional change due to relaxation, percent, <i>Max</i> a) Warp b) Weft	2 2	IS 2977

Table 2 Requirement of nylon fabric for outer layer

S No.	Characteristics	Requirement	Method of Test, Ref to
i)	Mass in grams per square metre	65±5	IS 1964
ii)	Tensile strength of the fabric, N, <i>Min</i> a) Warp b) Weft	800 500	IS 1969 (Part 1)
iii)	Tear strength, N, <i>Min</i> a) Warp b) Weft	100 100	IS 7016 Part 3 Method A1 (double tear)
iv)	Elongation at break, percent, <i>Min</i> a) Warp b) Weft	30 30	IS 1969 (Part 1)
v)	Water Repellence- Spray Rating Test <i>Min</i>	80	IS 390
vi)	Colour fastness to light (dyed fabrics only), change in colour	5 or better	IS/ISO 105-B02

vii)	Colour fastness to washing: Test C(3) 1) Change in colour 2) Staining of adjacent fabric	4 or better 4 or better	IS/ISO 105-C10
viii)	Breathability (water vapour resistance), $m^2.Pa/W$, <i>Min</i>	To be provided by JCT after getting test results from NITRA	IS 17376
ix)	Dimensional change, percent, <i>Max</i> a) Warp b) Weft	2 2	IS 2977
x)	Abrasion resistance after 20000 cycles	No thread breakage	IS 12673 (Parts 1 & 2)
xi)	Nature of coating	Polyurethane	Annex B of IS 16726
xii)	Separation of PU film	On fraying threads in warp and weft directions up to 5 mm after cutting the fabric from any portion, there shall not be a continuous PU film on the areas from where the threads have been removed	-

Table 3 Requirements of nylon fabric for carry bag

S No.	Characteristics	Requirement	Method of Test, Ref to
i)	Mass in grams per square metre	115±5	IS 1964
ii)	Tensile strength of the fabric, N, <i>Min</i> a) Warp b) Weft	1200 1050	IS 1969 (Part 1)
iii)	Tear strength, N, <i>Min</i> a) Warp b) Weft	100 90	IS 7016 Part 3 Method A1 (double tear)
iv)	Colour fastness to light (dyed fabrics only), change in colour	5 or better	IS/ISO 105-B02
v)	Colour fastness to washing: Test C(3) a) Change in colour b) Staining of adjacent fabric	4 or better 4 or better	IS/ISO 105-C10

vi)	Nature of coating	Polyurethane	Annex B of IS 16726
vii)	Separation of PU film	On fraying threads in warp and weft directions up to 5 mm after cutting the fabric from any portion, there shall not be a continuous PU film on the areas from where the threads have been removed	-
viii)	Abrasion resistance after 20000 cycles	No thread breakage	IS 12673 (Part 1 & 2)
ix)	Hydrostatic resistance (Water penetration Pressure head tester 30 cm water column for 60 min)	No penetration and no wetting on coated side	IS 7016 (Part 7)

e) BIS may carry out the editorial changes if required.

Item 5 NEW SUBJECTS FOR STANDARDIZATIONS

5.1 The committee scrutinized the technical inputs on Parasailing fabrics provided by Dr M K Talukdar representing M/s Kusumgar Corporates Pvt Ltd, Mumbai and decided to constitute a Panel to cover all the varieties of Parasailing fabric into one standard. The composition of the Panel so formed is as follows:

1. Dr. Anup Rakshit ITTA, Mumbai (Convener)
2. M K Talukdar Kusumgar Corporates Pvt Ltd, Mumbai
3. Shri Khushvinder Dhillon JCT Pvt. Ltd.
4. Member Secretary
5. Panel may co-opt other members including user organisations on the panel.

Item 6 TECHNICAL WORK PROGRAMME OF THE COMMITTEE

6.1 The Committee NOTED the list of published standards under TXD 37.

Item 7 DATE AND PLACE OF NEXT MEETING

7.1 The Committee DECIDED to hold the next meeting after all the actions arising out of the previous meeting and this meeting are completed in the first week of march. The date and place of the meeting would be finalized in consultation with the Chairperson in due course.

Item 8 ANY OTHER BUSINESS

8.1 The committee requested Garware Technical Fibres Limited, Pune to provide technical inputs for the revision of **IS 3345: 1989 “Sports nets-Specification (*first revision*)”** within a period of three months. Based on technical inputs so received the matter shall be taken up for discussion in the next meeting of TXD 37.

8.2 There being no other business, the meeting ended with a hearty vote of thanks to and from the Chair.