

केन्द्रीय मुहर विभाग-2

संदर्भ -: केमूवी-2/16:16090

19 01 2024

विषय: IS 16090:2013 के amendment no. 1 के अनुपालन के दिशा निर्देश

यह उपरोक्त विषय के संदर्भ में है।

सक्षम अधिकारी द्वारा अनुमोदित दिशानिर्देश अनुपालन हेतु संलग्न है।

सभी क्षेत्रीय/शाखा कार्यालयों से अनुरोध है की दिशानिर्देशों का तत्काल प्रभाव से अनुपालन सुनिश्चित करें।

आदित्य दास
वैज्ञानिक D

प्रमुख (केमूवी 2)

सभी क्षेत्रीय/शाखाकार्यालय/प्रयोगशालाएँ/TXD/LRMD

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16:16090

19 01 2024

Subject: Guidelines for implementation of amendment no. 1 to IS 16090:2013

This has reference to the subject mentioned above.

The Competent Authority has approved the enclosed Guidelines for implementation.

All ROs/BOs are requested to ensure the implementation of the above Guidelines with immediate effect.

(Aditya Das)
Scientist D

Head (CMD-2)

All ROs/BOs/Labs/TXD/LRMD

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16: 16090

19 01 2024

Subject: Guidelines for implementation of amendment no. 1 to IS 16090:2013 (Geo-synthetics - Geo-textiles used as protection (or cushioning) materials - Specification)

1. Amendment no. 1 to IS 16090:2013 has been published. The last date of implementation of the amendment is **12 June 2024**.
2. The significant changes in the standard through this amendment as listed in the Table are given for the purpose of general guidance.

| Clause No. | Change |
|------------|--|
| 4.3 | The line "Polyolefin material shall be made resistant to ultraviolet light by adding 2-3 percent carbon black" has been changed to "Polyolefin material shall be UV stabilized by adding suitable UV stabilizer and/or carbon black. Polyolefin material, if manufactured by using carbon black shall contain 2 percent to 3 percent of carbon black by mass with satisfactory dispersion" |
| Table 1 | ISO 9864 has been removed as an alternate test method for determination of mass per unit area Method of test for tensile strength has been changed from IS 13162 (Part 5) to IS 16635 (since IS 13162 (Part 5):1992 had been superseded by IS 16635:2017) Test method for CBR puncture resistance has been changed from IS/ISO 12236 to IS 16078 |

3. Consequent upon the issuance of the amendment, the existing product manual has been revised which is being circulated separately through BIS website.
4. The guidelines for implementation of the amendment are given below:

A. LICENSEES:

- i) All Licensees shall implement the amendment by **12 June 2024**. Any difficulty in implementation shall be brought to the notice of CMD 2 at the earliest but in any case at least 30 days before the last date of implementation. BOs shall ensure that no Licences are under operation as per IS 16090:2013 without the amendment after **12 June 2024**. The status of implementation of the amendment shall be confirmed by Head (BO) to CMD-2 within two weeks of the last date of concurrent running.
- ii) Licensees shall submit evidence of conformity to the additional/modified requirements through In-house/Independent Test Reports as well as revised declaration of test equipment as per Form 2 (if applicable). Verification of implementation of the amendment, wherever required, shall be verified through a surveillance visit within 30 days of confirmation of implementation of the amendment to standard by licensee.

- iii) If the Licensee fails to complete all actions by **12 June 2024** it shall be dealt with as per the prevailing guidelines.

B. APPLICATIONS FOR GRANT OF LICENCE:

- i. Existing Applications where Sample has been submitted in the Laboratory/Test Report has been issued by the Laboratory may be processed as per the old Standard. However, if the Applicant is desirous of considering the Application as per the amended Standard, a declaration may be obtained from the Applicant to that effect and the Application may be processed accordingly. An undertaking shall from such Applicants also be obtained that if the sample fails while considering the provisions of the amended Standard, Licence will not be granted by BIS as per the old version.
- ii. Applications which are recorded henceforth may be processed as per the old Standard or the amended Standard. Processing of Applications as per the old Standard shall be permitted only up to **11 June 2024** and for such cases Applicant shall give a declaration that they will implement the amended Standard by **12 June 2024**.
- iii. Beyond **12 June 2024** no Licence shall be granted as per the old Standard.

C. CHANGE IN SCOPE OF LICENCE:

- i. For change in scope of licence, the relevant provisions as given above for Applicants shall apply.
- ii. However, processing of such applications for change in scope of licence as per the old Standard shall be permitted only up to the date of implementation of the amendment or up to **12 June 2024** whichever is earlier.

6. The above guidelines come into force with immediate effect.

Aditya Das
Sc. D

Head (CMD-2)
DDG (Certification)

AMENDMENT NO. 1 DECEMBER 2023

TO

IS 16090 : 2013 GEO-SYNTHETICS — GEO-TEXTILES USED AS PROTECTION (OR CUSHIONING) MATERIALS — SPECIFICATION

(Page 1, clause 4.3, fourth sentence) — Substitute the following for the existing sentence:

'Polyolefin material shall be UV stabilized by adding suitable UV stabilizer and/or carbon black. Polyolefin material, if manufactured by using carbon black shall contain 2 percent to 3 percent of carbon black by mass with satisfactory dispersion.'

(Page 2, Table 1) — Substitute the following for existing table:

Table 1 Requirements for Geo-textiles Used as Geo-membrane Protection (or Cushioning) Materials

(Clauses 4.4, 4.5, 4.6 and 6.4)

| SI No. | Property | Requirements | | | | | | Method of Test, Ref to |
|--------|---|--------------|--------|--------|--------|--------|--------|---------------------------|
| | | Type 1 | Type 2 | Type 3 | Type 4 | Type 5 | Type 6 | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| i) | Mass per unit area, g/m ² | 300 | 400 | 600 | 800 | 1 100 | 1 200 | IS 14716 |
| ii) | Tensile strength, kN/m | 16 | 21 | 27 | 32 | 36 | 45 | IS 16635 |
| iii) | Trapezoidal tear strength, kN | 0.42 | 0.51 | 0.66 | 0.89 | 0.96 | 1.32 | IS 14293 |
| iv) | CBR puncture resistance, kN | 3.0 | 3.5 | 4.0 | 5.0 | 7.5 | 11.0 | IS 16078 |
| v) | Maximum UV resistance (after 500 h exposure), percent | 70 | 70 | 70 | 70 | 70 | 70 | IS 13162 (Part 2) |

(Page 4, Annex A) — Substitute the following for the existing entries for IS 13321 (Part 1) : 1992, IS 14716 : 1999

| <i>IS No.</i> | <i>Title</i> |
|---|--|
| IS 13321 (Part 1) : 2022/ ISO 10318-1 : 2015 | Geosynthetics: Part 1 Terms and definitions (<i>first revision</i>) |
| IS 14716 : 2021 | Geosynthetics — Test method for the determination of mass per unit area of geotextiles and geotextile-related products (<i>first revision</i>) |

(Page 4, Annex A) — Delete the entry for IS 3162 (Part 5) : 1992 and IS/ISO 12236 : 2006.

(Page 4, Annex A) — Insert the following new entries at the end:

| <i>IS No.</i> | <i>Title</i> |
|--------------------------------------|---|
| IS 16078 : 2013/ ISO 12236 : 2006 | Geosynthetics — Static puncture test (CBR test) |
| IS 16635 : 2017/ ISO 10319 : 2015 | Geosynthetics — Wide-width tensile test |