

REVIEW ANALYSIS OF INDIAN STANDARD

Sectional Committee No. & Title: MED 30 (Gaskets And Packing)

- 1. IS No:** IS 14539 : 1998
- 2. Title:** Insulation mill board - Specification
- 3. Date of review:** 16.09.2021
- 4. Review Analysis**

- i) **Status of standard(s), if any from which assistance had been drawn in the formulation of this IS.**

| Standard (No. & Title) | Whether the standard has since been revised | Major changes | Action proposed |
|------------------------|---|---------------|-----------------|
| NA | NA | NA | NA |

- ii) **Status of standards referred in the IS**

| Referred standards (No. & Title) | IS No. of this standards since revised | Changes that are of affecting the standard under review | Action proposed |
|----------------------------------|--|---|-----------------|
| NA as no IS referred | NA | NA | NA |

- iii) **Any other standards available related to the subject & scope of the standard being reviewed (International/regional/other national/association/consortia, etc. or of new or revision of existing Indian Standard)**

| Standard (No. & Title) | Provisions that could be relevant while reviewing the IS | Action proposed |
|--|---|---|
| JSS 5640-4: 2017 Asbestos Mill Board | Cl. 4-Material Cl.9 -Quality Assurance Tests (a) Hygroscopic moisture loss on drying at (105+/- 1 degree C) (b) Asbestos content (c) Acidity/Alkalinity (i) Acidity to methyl orange (ii) Alkalinity to phenolphthalein , percent by mass (d) Resistance to change of texture and softening | Assistance from this Standard may be drawn for revising the standard and for uniformity of standard in the country. |

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| | Appx A, C, D | |
| GOST 2850-1958 | Not available at BIS Library/MED as informed through Email | NA |
| BHEL AA 21525 & PS 21502B | Not available at BIS Library/MED as informed through Email | NA |
| OFM No. 62.020 ASTM Classification: F 104 F 132000 | Not available at BIS Library/MED as informed through Email | NA |

iv) Technical comments on the standard received, if any

No technical comments received, as informed by member secretary through email.

| Source | Clause of IS | Comment | Action proposed |
|--------|--------------|---------|-----------------|
| NA | NA | NA | NA |

v) Information available on technical developments that have taken place (on product/processes/practices/use or application/testing/input materials, etc)

| Source | Development | Relevant clause of the IS under review that is likely to be impacted (Clause & IS No.) | Action proposed |
|--------------------------------|---|--|--|
| Thermal Papers Private Limited | He has informed that (a) Test for compressibility and Recovery may be deleted as per present testing practice in the industry following GOST standard (b) Specified requirement for Tensile strength in either direction may be modified. | Table 1 , CL. 3.2, 7.10 Table 1, Cl. 3.2 7.4 | Test for compressibility and Recovery May be deleted after consensus in the technical committee for this IS. Tensile strength of the sample differs in along the grain direction and across the grain direction |

| | | | |
|-------------------------------------|--|-----------------|--|
| | | | (as same follows in standards for plywood). So, different specified minimum values for tensile strength may be given in IS –(a)along the grains (b) across the grains aligning with GOST standard. |
| Sigma Sealing & Insulations Pvt Ltd | IS may be aligned with GOST standard, specifically with tests specified. | Table 1, CL.3.2 | May be considered. |

vi) Issues arising out of changes in any related IS or due to formulation of new Indian Standard

No referred or cross referred standard for this IS.

| Related IS and its Title (revised or new) | Provision in the IS under review that would be impacted & the clause no. or addition of new clause/provision | Changes that may be necessary in the Standards under review | Action proposed |
|---|--|---|-----------------|
| NA | NA | NA | NA |

vii) Any consequential changes to be considered in other IS

No referred or cross referred standard for this IS.

| Related IS to get impacted | Requirements to be impacted |
|----------------------------|-----------------------------|
| NA | NA |

5. Any other observation: Following observations have been made by under-signee while reviewing the standard:

- (i) In table 1 , Column 3, specified value for Chloride(CL) and Sulphate(SO4), shall be “ No formation of suspended matter shall be observed”. instead of “traces”.
- (ii) In table 1, Column 3 , specified values for compressibility, shall be “ between -15% to -40% “ as in the formula given for calculating compressibility, $T_1 < T_2$ and $T_1 > T_0$.
- (iii) In cl. 5.2.1, second line, instead of “Bureau of Indian Standards Act , 1986”, it shall be “ Bureau of Indian Standards Act, 2016” .

6. Recommendations:

The following may be amended in the standard:

- Following tests may be added in the IS , aligning to JSS 5640-4: 2017 issued by Ministry of Deference , Govt . of India for uniformity of Standard in the country and since its version is latest revised i.e. in year 2017 (a) Hygroscopic moisture loss on drying at (105+/- 1 degree C) (b) Asbestos content (c) Acidity/Alkalinity (i) Acidity to methyl orange (ii) Alkalinity to phenolphthalein , percent by mass (d) Resistance to change of texture and softening € Requirements of material (raw material) i.e. material shall be free from cotton and other vegetable fibers. The binding material shall be of best grade quality, free from deleterious matter, and only a minimum quantity of it necessary to manufacture compact sheets shall be used.
- Test for compressibility and Recovery May be deleted after consensus in the technical committee for this IS, aligning with GOST standard as proposed by manufacturer.
- Tensile strength of the sample differs in along the grain direction and across the grain direction (as same follows in standards for plywood). So, different specified minimum values for tensile strength may be given in IS –(a)along the grains (b) across the grains aligning with GOST standard, as it has been found in discussion with manufacturers that they follow GOST standard for this product.
- In table 1 , Column 3, specified value for Chloride(CL) and Sulphate(SO₄), shall be “ No formation of suspended matter shall be observed”. instead of “traces”.
- In table 1, Column 3 , specified values for compressibility, shall be “ between -15% to -40% “ as in the formula given for calculating compressibility, $T_1 < T_2$ and $T_1 > T_0$.
- In cl. 5.2.1, second line, instead of “Bureau of Indian Standards Act , 1986”, it shall be “ Bureau of Indian Standards Act, 2016” .

(Shubham Tiwari)
Scientist-C