

BUREAU OF INDIAN STANDARDS
ELECTROTECHNICAL DEPARTMENT (ETD)
RESOLUTIONS OF SECTIONAL COMMITTEE MEETING

Sectional Committee	Meeting No	Date	Mode
Solid Electrical Insulating Materials and Insulation Systems Sectional Committee (ETD 02)	29 th	11/12/2024	Hybrid
Chairperson Sh. S. J. Lahiri		Member Secretary Shri Abinash Bordoloi	

Resolution 1

The minutes of the 28th Meeting of ETD 02- Solid Electrical Insulating Materials and Insulation Systems Sectional Committee held on 11.09.2024 has been confirmed by the committee.

Resolution 2

The existing working panels have been disbanded and new Working Panels and Working Groups have been constituted under the sectors/Sub-sectors identified under ETD 02 Sectional Committee.

Resolution 3

- a. The Co-option/Nomination request of Mr. Abhaey Kkulthe (In Personal Capacity) has been accepted by the Committee.
- b. Mr. Umang Boards Ltd, Jaipur has been Co-opted in the Working Group of 'Pressboards and related Material'. However, the co-option/nomination request for membership in the ETD 02 Sectional Committee has been deferred by the committee.
- c. The co-option/nomination request of M/s Elantas Beck India Ltd, Pune has been deferred by the committee.

Resolution 4

Working Group 06-Flexible Insulating Sleeves has been constituted, and the working group has been requested to examine IEC 60684-2:2011 with respect to the inputs provided by Ms. Ashitha PN, CPRI Bengaluru on Testing of Heat Shrinkable Insulating Sleeves and submit their inputs on the same within 2 weeks. Furthermore, WG 06 to decide on the types of heat Shrinkable Sleeves to be covered in the scope of the Indian Standard and submit their inputs within 2 weeks. Further course of action to be decided based on the inputs of WG 06. Decision on the TOR has been deferred.

Resolution 5

The committee has taken decisions on the Indian Standards mentioned in the table below and which have exceeded the review timelines.

Sl. No.	IS No.	Title of Indian Standard	Degree of Equivalence	Decision Taken during the Meeting
1	IS 10026 (Part 2):1999	Insulating varnishes containing solvents: Part 2 methods of tests (First Revision)	Modified/Technically Equivalent	The committee has decided to Reaffirm and Revise IS 10026 (Part 2):1999. Working Group WG 01- Resins & Varnishes has been constituted and the work of preparation of draft for the revision has been assigned to the same. WG-01 has been requested to submit the draft within 3 months.
2	IS 10026 (part 3/Sec 1): 1999	Insulating varnishes containing solvents: Part 3 specifications for individual materials: Sec 1 requirements for cold	Modified/Technically Equivalent	The committee has decided to Reaffirm and Revise IS 10026 (Part 3/Sec 1):1999. Working Group WG 01- Resins & Varnishes has been constituted and the work of preparation of draft for the revision

		curing finishing varnishes (First Revision)		has been assigned to the same WG-01 has been requested to submit the draft within 3 months.
3	IS 10026 (Part 3/Sec 2): 1999	Insulating varnishes containing solvents: Part 3 specifications for individual materials: Sec 2 requirements for hot curing varnishes (First Revision)	Modified/Technically Equivalent	The committee has decided to Reaffirm and Revise IS 10026 (Part 3/Sec 2):1999. Working Group WG 01- Resins & Varnishes has been constituted and the work of preparation of draft for the revision has been assigned to the same. WG-01 has been requested to submit the draft within 3 months. It has been decided to incorporate the specifications/requirements of baking/hot curing varnishes with temperature indexes 120, 130, 155, 180 and 200 in the revised edition of IS 10026 (Part 3/Sec 2).
4	IS 10026 (Part 3/Sec 3): 1983	Specification for insulating varnishes containing solvents: Part 3 specifications for individual materials: Sec 3 air drying varnishes with temperature index 130	Indigenous	The committee has decided to Reaffirm IS 10026 (Part 3/Sec 3):1983. Working Group WG 01- Resins & Varnishes has been constituted and the work of preparation of draft for the revision of IS 10026 (Part 3/Sec 1): has been assigned to the same. WG-01 has been requested to submit the draft within 3 months. It has been decided to incorporate the specifications/requirements of Air drying varnishes with temperature index 130 in the revised edition of IS 10026 (Part 3/Sec 1). IS 10026 (Part 3/Sec 3): 1983 would be withdrawn after the publication of the revised edition of IS 10026 (Part 3/Sec 1).
5	IS 10026 (Part 3/Sec 4): 1983	Specification for insulating varnishes containing solvents: Part 3 specifications for individual materials: Sec 4 baking varnishes with temperature index 120	Indigenous	The committee has decided to Reaffirm IS 10026 (Part 3/Sec 4):1983. Working Group WG 01- Resins & Varnishes has been constituted and the work of preparation of draft for the revision of IS 10026 (Part 3/Sec 2):1999 has been assigned to the same. WG-01 has been requested to submit the draft within 3 months. It has been decided to incorporate the specifications/requirements of baking/hot curing varnishes with temperature index 120 in the revised edition of IS 10026 (Part 3/Sec 2). IS 10026 (Part 3/Sec 4): 1983 would be withdrawn after the publication of the revised edition of IS 10026 (Part 3/Sec 2).
6	IS 10026 (Part 3/Sec 5): 1983	Specification for insulating varnishes containing solvents: Part 3 specifications for individual materials: Sec	Indigenous	The committee has decided to Reaffirm IS 10026 (Part 3/Sec 5):1983. Working Group WG 01- Resins & Varnishes has been constituted and the work of

		5 baking varnishes with temperature index 130		preparation of draft for the revision of IS 10026 (Part 3/Sec 2):1999 has been assigned to the same. WG-01 has been requested to submit the draft within 3 months. It has been decided to incorporate the specifications/requirements of baking/hot curing varnishes with temperature index 130 in the revised edition of IS 10026 (Part 3/Sec 2). IS 10026 (Part 3/Sec 5): 1983 would be withdrawn after the publication of the revised edition of IS 10026 (Part 3/Sec 2).
7	IS 10026(Part 3/Sec 6):1983	Specification for insulating varnishes containing solvents: Part 3 specifications for individual materials: Sec 6 baking varnishes with temperature index 155	Indigenous	The committee has decided to Reaffirm IS 10026 (Part 3/Sec 6):1983. Working Group WG 01-Resins & Varnishes has been constituted and the work of preparation of draft for the revision of IS 10026 (Part 3/Sec 2):1999 has been assigned to the same. WG-01 has been requested to submit the draft within 3 months. It has been decided to incorporate the specifications/requirements of baking/hot curing varnishes with temperature index 155 in the revised edition of IS 10026 (Part 3/Sec 2). IS 10026 (Part 3/Sec 6): 1983 would be withdrawn after the publication of the revised edition of IS 10026 (Part 3/Sec 2).
8	IS 10026(Part 3/Sec 7):1983	Specification for insulating varnishes containing solvents: Part 3 specifications for individual materials: Sec 7 baking varnishes with temperature index 180	Indigenous	The committee has decided to Reaffirm IS 10026 (Part 3/Sec 7):1983. Working Group WG 01-Resins & Varnishes has been constituted and the work of preparation of draft for the revision of IS 10026 (Part 3/Sec 2):1999 has been assigned to the same. WG-01 has been requested to submit the draft within 3 months. It has been decided to incorporate the specifications/requirements of baking/hot curing varnishes with temperature index 180 in the revised edition of IS 10026 (Part 3/Sec 2). IS 10026 (Part 3/Sec 7): 1983 would be withdrawn after the publication of the revised edition of IS 10026 (Part 3/Sec 2).
9	IS 10026 (Part 3/Sec 8): 1986	Specification for insulating varnishes containing solvents: Part 3 specifications for individual materials: Sec 8 baking varnishes with temperature index 200	Indigenous	The committee has decided to Reaffirm IS 10026 (Part 3/Sec 8):1986. Working Group WG 01-Resins & Varnishes has been constituted and the work of preparation of draft for the revision of IS 10026 (Part 3/Sec 2):1999 has been assigned to the same. WG-01 has been requested to submit the draft within 3 months. It has been decided to incorporate the

				specifications/requirements of baking/hot curing varnishes with temperature index 200 in the revised edition of IS 10026 (Part 3/Sec 2). IS 10026 (Part 3/Sec 8): 1986 would be withdrawn after the publication of the revised edition of IS 10026 (Part 3/Sec 2).
10	IS 10026 (Part 3/Sec 9): 1986	Specification for insulating varnishes containing solvents: Part 3 specifications for individual materials: Sec 9 baking varnishes with temperature index 130 for magnetic core sheets	Indigenous	The committee has decided to Reaffirm IS 10026 (Part 3/Sec 9):1986. Working Group WG 01- Resins & Varnishes has been constituted and the work of preparation of draft for the revision of IS 10026 (Part 3/Sec 2):1999 has been assigned to the same. WG-01 has been requested to submit the draft within 3 months. It has been decided to incorporate the specifications/requirements of baking/hot curing varnishes with temperature index 130 for magnetic core sheets in the revised edition of IS 10026 (Part 3/Sec 2). IS 10026 (Part 3/Sec 9): 1986 would be withdrawn after the publication of the revised edition of IS 10026 (Part 3/Sec 2).
11	IS 10333: 1982	Specification for epoxy resin systems for cast resin insulated power and control cable joints and terminations up to and including 11 kV	Indigenous	The committee has decided to reaffirm and revise IS 10333: 1982. Working Group WG 01- Resins & Varnishes has been constituted and the work of preparation of draft for the revision has been assigned to the same. WG-01 has been requested to submit the draft within 3 months.
10	IS 1175: 1981	Methods for grading and classification of muscovite mica blocks, thins and films (First Revision)	Indigenous	The committee has decided to archive IS 1175: 1981 for the time being. Inputs on the standard could not be obtained due to unavailability of Expertise in the field of Mica in the existing composition of ETD 02 Sectional Committee. The standard has been recommended for reaffirmation in the ARP report submitted due to no technological advancement as reported. It has been decided to co-opt experts relevant to the domain in the Sectional Committee. The committee decided to take further decision on IS 1175:1981 after obtaining inputs from the experts of the mica sector, till such time it has been decided to place the standard under archive.
11	IS 12747 : Part 1: 2011/IEC 60626-1:2009	Combined flexible materials for electrical insulation: Part 1 definitions and general requirements (First Revision)	Identical under Dual Numbering	The committee has decided to Reaffirm and Revise IS 12747 (Part 1):2011/IEC 60626-1:2009. Working Group WG 08- Combined Flexible Materials has been constituted and the work of preparation of draft for the revision of IS 12747(Part 1):2011 has been

				assigned to the same. WG-08 has been requested to submit the draft within 3 months.
12	IS 13066: 1991	Prepreg based on glass woven fabric for electrical applications - Specification	Indigenous	The committee has decided to Reaffirm and Revise IS 13066:1991. Working Group WG 09- 'Insulating Fabrics' has been constituted and the work of preparation of draft for the revision has been assigned to the same. Experts relevant to the domain of Insulating Fabrics may be co-opted by WG-10 under intimation to BIS. WG-10 has been requested to submit the draft within 3 months.
13	IS 13508: 1992	Test procedure for measurement of loss tangent angle of coils and bars for machine winding - Guide	Indigenous	The committee has decided to reaffirm IS 13508:1992.
14	IS 15652:2006	Insulating mats for electrical purposes - Specification	Indigenous	The committee has decided to Reaffirm and Revise IS 15652:2006. Working Group WG-03- 'Elastomeric Materials' has been constituted and the work of preparation of draft for the revision of IS 15652:2006 has been assigned to the same. It has been decided to disband the existing Working Panel 1. WG-03 has been requested to submit the draft within 3 months. Manufacturers and Utilities may be co-opted in WG 03 under intimation to BIS for completion of the assigned ask.
15	IS 2824: 2007/IEC 60112:2003	Method for the determination of the proof and the comparative tracking indices of solid insulating materials (Second Revision)	Identical under Dual Numbering	The committee has decided to Reaffirm IS 2824:2007/IEC 60112:2003. The current status of equivalent IEC standard is IEC 60112: 2020, which is under revision at IEC. The work of revision of IS 2824 will be taken up after the publication of the revised edition of IEC 60112.
16	IS 4248: 1967	Specification for non - Ignitable and self - Extinguishing boards (With Mineral Base) for electrical purposes	Indigenous	The committee has decided to reaffirm and revise IS 4248:1967. Working Group WG 02- Pressboards and Related Materials has been constituted and the work of preparation of draft for the revision has been assigned to the same. Experts relevant to the domain may be co-opted by WG-02 under intimation to BIS. WG-02 has been requested to submit the draft within 3 months.
17	IS 4249: 1967	Classification and methods of tests for non - Ignitable and self - Extinguishing properties of solid electrical insulating materials	Indigenous	The committee has decided to reaffirm and revise IS 4249:1967. Working Group WG 02- Pressboards and Related Materials has been constituted and the work of preparation of draft for the revision has been assigned to the same. Experts relevant to the domain may

				be co-opted by WG-02 under intimation to BIS. WG-02 has been requested to submit the draft within 3 months.
18	IS 6230: 1970	Specification for woven asbestos tape for electrical insulating purposes	Indigenous	The committee has decided to archive IS 6230:1970 due to the obsolescence of the product. However, the committee has also decided to check the regulatory provisions available (if any) with respect to the ban of use of asbestos on products. Decision on Withdrawal of the standard will be taken after the review of the regulatory provisions (if any) with respect to usage of asbestos.
19	IS 7084: 1973	Specification for bitumen - Based filling compounds for electrical purpose	Indigenous	The committee has decided to withdraw IS 7084:1973 since the product is obsolete and replaced by epoxy resins, polyurethanes now. Further, the base standard i.e. BS 1858 from which assistance was taken during the formulation of the standard is also withdrawn.
20	IS 7755: 1975	Specification for high tension insulating cotton tape impregnated with bitumen - Based compound	Indigenous	The committee has decided to withdraw IS 7755:1975 since the product is obsolete and was used for jointing and insulation of conductor fittings for solid type paper insulated cables. The Indian Standard for Paper Insulated Lead Sheathed cables i.e. IS 692:1994 has already been withdrawn. Further, decision to withdraw IS 7084:1973 has also been taken, which is referred in IS 7755:1975.
21	IS 8504 : Part 1: 2012/IEC 60216-1:2001	Electrical insulating materials - Thermal endurance properties: Part 1 ageing procedures and evaluation of test results (Second Revision)	Identical under Dual Numbering	The committee has decided to Reaffirm and Revise IS 8504 (Part 1):2012/IEC 60216-1:2001. Working Group WG 10 – Thermal Endurance of Electrical Insulating materials has been constituted and the work of preparation of draft for the revision of IS 8504 (Part 1) has been assigned to the same. WG-10 has been requested to submit the draft within 3 months.
22	IS 8504 (Part 4) : 2013/IEC 60216 - 3 : 2006	Electrical insulating materials - Thermal endurance properties: Part 4 instructions for calculating thermal endurance characteristics (First Revision)	Identical under Dual Numbering	The committee has decided to Reaffirm and Revise IS 8504 (Part 4):2013/IEC 60216-3:2006. Working Group WG 10 – Thermal Endurance of Electrical Insulating materials has been constituted and the work of preparation of draft for the revision of IS 8504 (Part 4) has been assigned to the same. WG-10 has been requested to submit the draft within 3 months.
23	IS 8504 (Part 6):2012/IEC 60216-5:2008	Electrical insulating materials - Thermal endurance properties: Part 6 determination of relative thermal	Identical under Dual Numbering	The committee has decided to Reaffirm and Revise IS 8504 (Part 6):2012/IEC 60216-5:2008. Working Group WG 10– Thermal Endurance of Electrical Insulating

		endurance index (RTE) of an insulating material		materials has been constituted and the work of preparation of draft for the revision of IS 8504 (Part 6) has been assigned to the same. WG-10 has been requested to submit the draft within 3 months.
24	IS 8504 (Part 7):2012/IEC 60216-6:2006	Electrical insulating materials - Thermal endurance properties: Part 7 determination of thermal endurance indices (TI And RTE) of an insulating material using the fixed time frame method.	Identical under Dual Numbering	The committee has decided to Reaffirm and Revise IS 8504 (Part 7):2012/IEC 60216-6:2006. Working Group WG 10– Thermal Endurance of Electrical Insulating materials has been constituted and the work of preparation of draft for the revision of IS 8504 (Part 7) has been assigned to the same. WG-10 has been requested to submit the draft within 3 months.
25	IS 9044: 1979	Method of measuring thickness of mica blocks, thins, films and splittings	Indigenous	The committee has decided to archive IS 9044: 1979 for the time being. Inputs on the standard could not be obtained due to unavailability of Expertise in the field of Mica in the existing composition of ETD 02 Sectional Committee. As per the ARP report submitted, there is no information about new method of testing being adopted by the industry for measurement of the thickness of Mica blocks, sheets, films and splittings hence no technical change has been recommended for incorporation in IS 9044:1979. It has been decided to co-opt experts relevant to the domain in the Sectional Committee. The committee decided to take further decision on IS 9044:1979 after obtaining inputs from the experts of the mica sector, till such time it has been decided to place the standard under archive.
26	IS 9045: 1979	Thermal classification of phlogopite mica splittings	Indigenous	The committee has decided to archive IS 9045: 1979 for the time being. Inputs on the standard could not be obtained due to unavailability of Expertise in the field of Mica in the existing composition of ETD 02 Sectional Committee. The standard has been recommended for Reaffirmation in the ARP Report. The standard (ISO 5023:1977) from which considerable assistance was taken during formulation of the standard is withdrawn. It has been decided to co-opt experts relevant to the domain in the Sectional Committee. The committee decided to take further decision on IS 9045:1979 after obtaining inputs from the experts of the mica sector, till such time it has been decided to place the standard under archive.

27	IS 9502: 1980	Specification for muscovite mica components for electronic equipment	Indigenous	The committee has decided to archive IS 9502: 1980 for the time being. Inputs on the standard could not be obtained due to unavailability of Expertise in the field of Mica in the existing composition of ETD 02 Sectional Committee. The standard has been recommended for withdrawal in the ARP Report. The standard (ISO 5816:1979) from which considerable assistance was taken during formulation of the standard is withdrawn. It has been decided to co-opt experts relevant to the domain in the Sectional Committee. The committee decided to take further decision on IS 9502:1980 after obtaining inputs from the experts of the mica sector, till such time it has been decided to place the standard under archive.
28	IS 9947: 2011/IEC 60587:2007	Electrical insulating materials used under severe ambient conditions - Test methods for evaluating resistance to tracking and erosion (First Revision)	Identical under Dual Numbering	The committee has decided to Reaffirm and Revise IS 9947 :2011/IEC 60587:2007. Working Group WG 11 –Tracking has been constituted and the work of preparation of draft for the revision of IS 9947: 2011 has been assigned to the same. WG-11 has been requested to submit the draft within 3 months.
29	IS 7809 (Part 1): 1975	Specification for pressure sensitive adhesive tapes for electrical purposes: Part 1 general requirements	Modified/Technically Equivalent	The committee has decided to revise IS 7809 (Part 1):1975. Working Group WG-05 has been constituted and the work of preparation of draft for revision has been assigned to the same. WG-05 has been requested to submit the draft within 3 months.
30	IS 7809 (Part 2): 1977	Specification for pressure sensitive adhesive tapes for electrical purpose : Part 2 methods of test	Indigenous	The committee has decided to revise IS 7809 (Part 2):1977. Working Group WG-05-Insulating Tapes has been constituted and the work of preparation of draft for revision has been assigned to the same. WG-05 has been requested to submit the draft within 3 months.
31	IS 7809 (Part 3/Sec 1): 1986	Specification for pressure sensitive adhesive insulating tapes for electrical purposes: Part 3 requirements or individual materials: Sec 1 plasticized polyvinylchloride tapes with non - Thermosetting adhesive (First Revision)	Modified/Technically Equivalent	The committee has decided to reaffirm and revise IS 7809 (Part 3/Sec 1):1986. Working Group WG-05-Insulating Tapes has been constituted and the work of preparation of draft for revision has been assigned to the same. WG-05 has been requested to submit the draft within 3 months.
32	IS 7809 (Part 3/Sec 2): 1981	Specification for pressure sensitive adhesive tapes for electrical purposes: Part 3 Specifications for individual materials: Sec 2 Polyester film tapes	Modified/Technically Equivalent	The committee has decided to revise IS 7809 (Part 3/Sec 2):1981. Working Group WG-05-Insulating Tapes has been constituted and the work of preparation of draft for revision has been assigned to the

		(PETP) with thermosetting adhesive		same. WG-05 has been requested to submit the draft within 3 months.
33	IS 7809 (Part 3/Sec 3): 1981	Specification for pressure sensitive adhesive tapes for electrical purposes: Part 3 specification for individual materials: Sec 3 polyster film tapes (PETP) with non - Thermosetting adhesive	Modified/Technically Equivalent	The committee has decided to revise IS 7809 (Part 3/Sec 3):1981. Working Group WG-05-Insulating Tapes has been constituted and the work of preparation of draft for revision has been assigned to the same. WG-05 has been requested to submit the draft within 3 months.
34	IS 7809 (Part 3/Sec 4): 1977	Specification for pressure sensitive adhesive tapes for electrical purposes: Part 3 specifications for individual materials: Sec 4 cellulosic paper, creped with thermosetting adhesive	Modified/Technically Equivalent	The committee has decided to reaffirm and revise IS 7809 (Part 3/Sec 4):1977. Working Group WG-05-Insulating Tapes has been constituted and the work of preparation of draft for revision has been assigned to the same. WG-05 has been requested to submit the draft within 3 months.
35	IS 7809 (Part 3/Sec 5): 1977	Specification for pressure sensitive adhesive tapes for electrical purposes: Part 3 specifications for individual materials: Sec 5 cellulosic paper with thermosetting adhesive	Modified/Technically Equivalent	The committee has decided to revise IS 7809 (Part 3/Sec 5):1977. Working Group WG-05-Insulating Tapes has been constituted and the work of preparation of draft for revision has been assigned to the same. WG-05 has been requested to submit the draft within 3 months.
36	IS 9455:1980	Muscovite Mica Blocks, thins and Films Based on Electrical Properties	Indigenous	The committee has decided to archive IS 9455: 1980 for the time being. Inputs on the standard could not be obtained due to unavailability of Expertise in the field of Mica in the existing composition of ETD 02 Sectional Committee. No inputs have been obtained from the ARP report submitted. However, Standard from which assistance has been taken i.e. ASTM D748-71 has been revised and the current version is ASTM D748-18. It has been decided to co-opt experts relevant to the domain in the Sectional Committee. The committee decided to take further decision on IS 9455:1980 after obtaining inputs from the experts of the mica sector, till such time it has been decided to place the standard under archive.

Resolution 6

It has been decided to form a working group for the development of New Indian Standard on “Silicone Sleeves for Overhead Conductors” consisting of Manufacturers i.e. M/s 3 A Associates Incorporated, M/s 3 M Electro & Communication India Pvt. Ltd, PGCIL and Utilities. Experts from Industries and Utilites are to be co-opted in the working group. The working group to collect inputs from utilities and relevant stakeholders with respect to the usage of ‘Silicon Sleeves for Overhead Conductors’, that may be useful for the formulation of Indian Standard on the same.

Resolution 7

ETD 02 Sectional Committee to collect inputs from utilities and relevant stakeholders with respect to the usage of ‘Bondable Silicone Rubber Tapes’, that may be useful for the formulation of Indian Standard on the same.

*Note: The detailed Minutes of the Meeting will follow.