



IEC Hírek 2011

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IEC

26 tagország

14 megfigyelő ország

Magyarországról : 45 tag

97 megfigyelő



International
Electrotechnical
Commission

TC10 - Fluids for electrotechnical applications

TC10 Chairman: Dr. Raymond BARTNIKAS (CA)

TC10 Secretary: Prof. Massimo POMPILI (IT)

TC10 Assistant Secretary: Mr. Vander TUMIATTI (IT)

TC10 Scope: To prepare product specifications, test methods as well as maintenance and use guides for liquid and gaseous dielectrics. Also to prepare specifications and maintenance and use guides for lubricants and control fluids for steam turbines, generators and control systems as well as to assist in the preparation of test methods for such fluids

Label	Title
Working Groups	Development of methods for detection of acidity for non-mineral insulating liquids, such as natural and synthetic esters
WG 17	Revision of IEC 60296 and preparation of a new standard for reprocessed mineral insulating oils
WG 21	Thermal life analysis of insulating paper through oil analysis
WG 33	Analysis of dissolved and suspended metals
WG 34	Quantitative determination of corrosive sulfur compounds in insulating fluids
WG 37	Natural esters to be employed as insulating fluids
Project Teams	
PT 10-5	

Maintenance Teams

MT 20	Maintenance of IEC 60599
MT 22	Maintenance of IEC 60422
MT 23	Maintenance of IEC 60836 and IEC 60944
MT 24	Maintenance of IEC 60590, IEC 60666, IEC 60814, IEC 61198 and IEC 61619
MT 25	Maintenance of IEC 60475, IEC 60567 and IEC 61181
MT 26	Maintenance of IEC 60480 and IEC 60376
MT 27	Maintenance of IEC 60588, IEC 61039 and IEC 61100
MT 28	Maintenance of IEC 62021
MT 30	Maintenance of IEC 60156, IEC 60628, IEC 60897 and IEC/TR 61294
MT 31	Maintenance of IEC 60970
MT 36	Maintenance of IEC 61099 and IEC 61203

Joint Maintenance Teams

JMT 9	Revision of IEC 60050-212 (1990-10) Managed by TC 112
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- IEC 60076-7: Power transformers - Part 7: Loading guide for oil-immersed power transformers
- IEC 60156: Insulating liquids - Determination of the breakdown voltage at power frequency - Test method
- IEC 60247: Insulating liquids - Measurement of relative permittivity, dielectric dissipation factor (tan d) and d.c. resistivity
- IEC 60296: Fluids for electrotechnical applications - Unused mineral insulating oils for transformers and switchgear
- IEC 60475: Method of sampling liquid dielectrics
- IEC 60567: Oil-filled electrical equipment - Sampling of gases and of oil for analysis of free and dissolved gases - Guidance
- IEC 60599: Mineral oil-impregnated electrical equipment in service - Guide to the interpretation of dissolved and free gases analysis
- IEC 60666: Detection and determination of specified additives in mineral insulating oils
- IEC 60814: Insulating liquids - Oil-impregnated paper and pressboard - Determination of water by automatic coulometric Karl Fischer titration
- IEC 60970: Insulating liquids - Methods for counting and sizing particles

- IEC 61125: Unused hydrocarbon based insulating liquids - Test methods for evaluating the oxidation stability
- IEC 61198: Mineral insulating oils - Methods for the determination of 2-furfural and related compounds
- IEC 61619: Insulating liquids – Contamination by polychlorinated biphenyls (PCBs) – Method of determination by capillary column gas chromatography
- IEC 62021-1: Insulating liquids – Determination of acidity - Part 1: Automatic potentiometric titration
- IEC 62021-2: Insulating liquids – Determination of acidity – Part 2: Colourimetric titration
- IEC 62535: Insulating liquids – Test method for detection of potentially corrosive sulphur in used and unused insulating oils
- EN 14210 Surface active agents - Determination of interfacial tension of solutions of surface active agents by the stirrup or ring method
- ISO 2049: Petroleum products – Determination of colour (ASTM scale)
- ISO 2719: Determination of flash point - Pensky-Martens closed cup method

- ISO 3016: Petroleum products – Determination of pour point
- ISO 3104: Petroleum products – Transparent and opaque liquids – Determination of kinematic viscosity and calculation of dynamic viscosity
- ISO 3675: Crude petroleum and liquid petroleum products – Laboratory determination of density – Hydrometer method
- ISO 4406: Hydraulic fluid power - Fluids - Method for coding level of contamination by solid particles
- ISO 4407: Hydraulic fluid power – Fluid contamination – Determination of particulate contamination by the counting method using an optical microscope
- ISO 4793: Laboratory sintered (fritted) filters - Porosity grading, classification and designation
- ISO 6247: Petroleum products -- Determination of foaming characteristics of lubricating oils
- ISO 12185: Crude petroleum and petroleum products -- Determination of density -- Oscillating U-tube method
- ISO Guide 73: Risk Management – Vocabulary
- ASTM D971: Standard Test Method for Interfacial Tension of Oil Against Water by the Ring Method
- ASTM D1275: Standard Test Method for Corrosive Sulfur in Electrical Insulating Oils

Revised draft agenda of the meeting to be held in Burghausen (Germany)

From 19th through 20th September 2011

Meeting starting time: 09.00 am of 19th September 2011

Expected meeting finishing time 04.00 pm of 20th September 2011

Item	Description	Doc. reference
1	Opening of the meeting	
2	Approval of the agenda	10/834A/DA
3	To discuss the matters arising from the minutes of the last meeting held in Milano (IT) from 14 th through 15 th September, 2009	10/793/RM
4	IEC Central Office news	
5	To note the report of the Secretary on the work carried out since the last meeting	10/850/INF
6	To note the report of activity of WG 17 (Mr. B. Pahlavanpour):	10/845/CD
6.1	IEC 62021-3: "Insulating liquids – Determination of acidity – Part 3: Test method for non-mineral insulating liquids"	10/844/RVN
7	To note the report of activity of WG21 (Mr. M. Duval)	10/851/INF
7.1	Revision of IEC 60296 – "Fluids for electrotechnical applications – Unused mineral insulating oils for transformers and switchgear"	10/839/RVC
7.2	IEC 62701 – "Reprocessed mineral insulating oils - Re-refined oils and reclaimed mineral insulating oils for transformers and switchgear " (P.L.: Mr. B. Lohmeyer)	10/852/INF 10/843/CD and its RVN (as Meeting Document)
8	To note the report of activity of MT 22 (Mr. B. Pahlavanpour)	10/853/INF
8.1	IEC 60422 – "Supervision and maintenance guide for mineral insulating oils in electrical equipment"	10/841/RVC
9	To note the report of activity of MT 23 (Mr. J. Lambrecht)	10/854/INF
9.1	Revision of IEC 60836 – "Specifications for unused silicone insulating liquids for electrotechnical purposes" Standard's confirmation until 2016 (actual Stability Date, SD: 2012)	10/814/AC
10	To note the report of activity of MT 25 (Mr. M. Duval)	10/855/INF
10.1	Revision of IEC 60475 - Method of sampling liquid dielectrics	10/848/FDIS
10.2	Revision of IEC 60567 - Oil-filled electrical equipment - Sampling of gases and of oil for analysis of free and dissolved gases. Guidance	10/849/FDIS

Item	Description	Doc. reference
10.3	Revision of IEC 81181 - Amendment 1 to IEC 81181 "Mineral oil-filled electrical equipment - Application of dissolved gas analysis (DGA) to factory tests on electrical equipment"	10/838/CDV
11	To note the report of activity of MT 27 (Mr. R. Campi)	10/856/INF
11.1	Revision of IEC 80588 Series (-1, -2, -3 -4, -5 and -6) - Askarels for transformers and capacitors	10/827/INF 10/828-29-30-31-32-833/RR
12	To note report of activity of JWG 33 for "Thermal life evaluation of insulating paper" (Mr. R. Maina)	10/857/INF
13	To note report of activity of Working Group 34 (WG34) for "Analysis of dissolved and suspended metals" (Mr. R. Maina)	10/858/INF
14	To note report of activity of MT 36 for the revision of IEC Standards IEC 81099 and IEC 81203 (Mr. R. Martin)	10/859/INF
14.1	Revision of IEC 81099 Ed. 2.0: "Specification for unused synthetic organic esters for electrical purposes"	
15	To note report of activity of Working Group 37 (WG37) for the development of IEC Standard on "Quantitative determination of corrosive sulfur compounds in insulating fluids" - Parts 1, 2 and 3 (Mr. S. Kapila)	10/xxx/INF (*)
15.1	Development of future IEC 82697-1 – Ed.1: "Quantitative determination of corrosive sulfur compounds in insulating liquids: Part 1: Method for Quantitative Determination of Dibenzyl Disulfide (DBDS)"	10/825/CDV 10/840A/RVC
15.2	Development of future IEC 82697-2 – Ed.1: "Quantitative determination of corrosive sulfur compounds in insulating liquids: Part 2: Method for quantitative determination of total corrosive sulphur (TCS) compounds in insulating liquids"	
15.3	Development of future IEC 82697-3 – Ed.1: "Quantitative determination of corrosive sulfur compounds in insulating liquids: Part 3: Test methods for quantitative determination of total mercaptans and disulfides (TMD) and other targeted corrosive sulfur species"	
16	To note report of activity of PT-5 for the development of IEC Standard on "Natural esters to be employed as insulating fluids" (Mr. S. Kapila)	10/847ANP
17	Proposal for setting-up of Working Group for the development of IEC Standards on SF ₆ leakages monitoring and for the revision of the IEC 60480 (limits for the mixtures of SF ₆ and other gases). Setting-up of new WG	10/xxx/INF
17.1	Proposal for the development of IEC Standard on "Method for determination of SF ₆ leakage in the electrical equipments"	
17.2	Proposal of Sc17A Secretary based on the CA NC comment for the revision for setting-up of Working Group for the development of IEC Standard 60480 for introducing limits for the mixtures of SF ₆ and other gases	
18	Transfer to ISO TC28/SC4 of IEC TC Standards	10/xxx/INF
19	Discussion of maintenance programme and NC comments	10/860/INF
19.1	Maintenance IEC 60599 Ed.2.0 / 2.1 (actual SD 2013) - MT20	
19.2	Maintenance of IEC 60599 Am1 Ed.1 (actual SD 2013) - MT20	

Item	Description	Doc. reference
19.3	Maintenance of IEC 61125 Ed.1 (actual SD 2013) - MT21	
19.4	Maintenance of IEC 61125 Am1 Ed.1 (actual SD 2013) - MT21	
19.5	Maintenance of IEC 61181 Ed.2 (actual SD 2011) - MT25	
19.6	Maintenance of IEC 61221 Ed.2 (actual SD 2011) - MT25	
19.7	Maintenance of IEC 61294TR Ed.1 (actual SD 2013) – MT30	
19.8	Maintenance of IEC 60480 (actual SD 2014) – MT28 or a new WG	
19.9	Maintenance of IEC 62535 Ed.1 (actual SD 2012) – MTxx	
20	To note the programme of work of the Committee as recorded by the Central Office in its Data base	10/863/PW
21	Future work	
22	Liaisons with other TC/SCs, ISO committees and outside standardization bodies	
22.1	IEC TC 14	
22.2	IEC TC 17	
22.3	IEC TC 20	
22.4	IEC SC 36A	
22.5	IEC TC 38	
22.6	IEC TC 89	
22.7	IEC TC 111	10/861/INF
22.8	IEC TC 112	10/862/INF
22.9	ISO TC 28	
22.10	CIGRE SC A2	
22.11	CIGRE SC D1	
23	Discussion and approval of the Strategic Policy Business Plan (SBP)	10/xxx/DC (*)
24	Any other business	
25	Date and place of the next meeting	
26	Close of the meeting	
(*)	These Documents will be circulate prior the PM	

Please note that an electronic version of this Draft Agenda in which hyperlinks have been established will be available on the [IEC website](#) approximately four weeks prior to the meeting. Information on electronic meeting folders is given in AC/136/2001.

Liaison between TC10 and TC111 (Environmental standardization for electrical and electronic products and systems)

To be discussed under Agenda, Item 22.7 of 10/834A/DA

IEC TC10

Chairman: Mr. Ray Bartnikas (CA)

Secretary: Mr. Massimo Pompili (IT)

Task: To prepare product specifications, test methods as well as maintenance and use guides for liquid and gaseous dielectrics.

Also to prepare specifications and maintenance and use guides for lubricants and control fluids for steam turbines, generators and control systems as well as to assist in the preparation of test methods for such fluids.

TC10 Liaison's Officer: **Mrs Maria Szebeni (HU)**

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IEC TC111

Chairman: Mr Yoshiaki Ichikawa (JP)

Secretary: Mr. Andrea Legnani (IT)

TC 111 Liaison's Officer: To be appointed.

Scope:

- To prepare the necessary guidelines, basic and horizontal standards, including technical reports, in the environmental area, in close cooperation with product committees of IEC, which remain autonomous in dealing with the environmental aspects relevant to their products;
- To liaise with product committees in the elaboration of environmental requirements of product standards in order to foster common technical approaches and solutions for similar problems and thus assure consistency in IEC standards;
- To liaise with ACEA and ISO/TC 207;
- To monitor closely the corresponding regional standardization activities worldwide in order to become a focal point for discussions concerning standardization;
- EMC and EMF aspects are excluded from the scope

Conclusion: Between the IEC TC10 and IEC TC111 it is establishing a permanent liaison ????, following the proposal of the TC10 made during its 2007 PM held in Paris (see 10/737/RM – Item 24).

Report of the IEC TC10 Mr. Russell Martin (UK), MT 36 Convenor, on the work carried out since the meeting

To be discussed under Agenda, Item 14 of 10/834A/DA

Convenor: Mr. Russell Martin (UK)

Task:

To maintain IEC 61099 (“Specifications for unused synthetic organic esters for electrical purposes” – MRD 2011) and IEC 61203 (“Synthetic organic esters for electrical purposes - Guide for maintenance of transformer esters in equipment” – MRD 2019).

Report of the IEC TC10 Mr. Riccardo Maina (IT), WG34 Convenor, on the work carried out since last meeting

To be discussed under Agenda, Item 13 of 10/834A/DA

Convenor: Mr. Riccardo Maina (IT)

Task: To develop test method(s) for the determination and quantification of metals in mineral insulating oils in service.

Report of the IEC TC10 Mr. Riccardo Maina (IT), JWG33 Convenor, on the work carried out since last meeting

To be discussed under Agenda, Item 12 of 10/834A/DA

Convenor: Mr. Riccardo Maina (IT)

Task: The task of this JWG is to develop guidelines for the estimation of remaining life of insulating papers in transformers in service throughout the results of furfural and related compounds dissolved in insulating oil.

Report of the IEC TC10 Mr. Michel Duval (CA), MT25 Convenor, on the work carried out since last meeting

To be discussed under Agenda, Item 10 of 10/834A/DA

Convenor: Mr. Michel Duval (CA)

Task: Revision of IEC 60475 “Method of sampling liquid dielectrics”, IEC 60567 “Oil-filled electrical equipment - Sampling of gases and of oil for analysis of free and dissolved gases – Guidance” and IEC Amendment 1 to IEC 61181 “Mineral oil-filled electrical equipment - Application of dissolved gas analysis (DGA) to factory tests on electrical equipment”

Report of the IEC TC10 Mr. Jens Lambrecht (DE), MT23 Convenor, on the work carried out since last meeting

To be discussed under Agenda, Item 9 of 10/834A/DA

Convenor: Mr. Jens Lambrecht

Task: To maintain the IEC 60944 Ed. 1.0 “Guide for the maintenance of silicone transformer liquids” (SD: 2015) and IEC 60836 Ed. 2.0 “Specifications for unused silicone insulating liquids for electrotechnical purposes” (SD: 2012)

Report of the IEC TC10 Mr. Bernd Lohmeyer (DE), WG21-PL62701 on the work carried out since last meeting

To be discussed under Agenda, Item 7.2 of 10/834A/DA

Please read 10/851/INF

Convenor: Mr. Michel Duval (CA) – Project Leader: Mr. Bernd Lohmeyer (DE).

Task and Background:

MT21 was transformed into WG21 in August 2010 by IEC CO, in order to include the development of a new Standard (IEC 62701) on recycled oils (10/809/NP). The tasks of the WG21 are:

- the maintenance of the IEC 60296 (Ed. 3.0 published on 2003-11) with the main item to introduce specifications for potentially corrosive sulphur in insulating oils (please read 10/851/INF).

- **the development** a new Standard on recycled oils (10/809/NP). For this specific task Mr. B. Lohmeyer was appointed as PL. The status of this project is described in this INF Document.

The 10/809/NP was approved as reported in the Doc. 10/824A/RVN, with the request **of circulating** an advanced CD well aligned with the 60296.

On July 2011 a new CD was circulated (10/843/CD) and the comments will be possibly discussed at the 2011 TC10 PM (these comments will be distributed at the 2011 Burghausen PM in the form of a meeting document).

**KÖSZÖNÖM A
FIGYELMET!**

