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Materials for printed boards and other interconnecting structures - Part 2-53: Reinforced base materials clad and unclad - PTFE unfilled laminate sheets of defined flammability (vertical burning test), copper-clad

Matériaux pour circuits imprimés et autres structures d'interconnexion - Partie 2-53: Matériaux de base renforcés, métallisés et non métallisés - Feuilles stratifiées non chargées en PTFE d'inflammabilité définie (essai de combustion verticale), plaquées cuivre

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Materials for printed boards and other interconnecting structures - Part 2-53: Reinforced base materials clad and unclad - PTFE unfilled laminate sheets of defined flammability (vertical burning test), copper-clad

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IEC 61249-2-53 has been prepared by IEC technical committee 91: Electronics assembly technology. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
91/1978/CDV	91/2044/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts in the IEC 61249 series, published under the general title *Materials for printed boards and other interconnecting structures*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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1 Scope

This part of IEC 61249 specifies requirements for properties of PTFE unfilled reinforced laminated sheet of a thickness 0,05 mm up to 10,0 mm of defined flammability (vertical burning test), copper-clad.

This part of IEC 61249 is applicable to the design, manufacture, use of PTFE unfilled reinforced laminated sheet of defined flammability (vertical burning test), copper-clad.

Its flame resistance is defined in terms of the flammability requirements of 8.4.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61189-2:2006, *Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 2: Test methods for materials for interconnection structures*

IEC 61189-2-721:2015, *Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 2-721: Test methods for materials for interconnection structures - Measurement of relative permittivity and loss tangent for copper clad laminate at microwave frequency using a split post dielectric resonator*

IEC 61189-2-803:2023, *Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 2-803: Test methods for Z-axis expansion of base materials and printed boards*

IEC 61189-2-807:2021, *Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 2-807: Test methods for materials for interconnection structures - Decomposition temperature (T_d) using TGA*

IEC 61189-2-809:2024, *Test methods for electrical materials, printed board and other interconnection structures and assemblies - Part 2-809: X/Y coefficient of thermal expansion (CTE) test for thick base materials by TMA*

IEC 61249-5-1, *Materials for interconnection structures - Part 5: Sectional specification set for conductive foils and films with and without coatings - Section 1: Copper foils (for the manufacture of copper-clad base materials)*

IEC 61249-6-3:2023, *Materials for printed boards and other interconnecting structures - Part 6-3: Sectional specification set for reinforcement materials - Specification for finished fabric woven from "E" glass for printed boards*

ISO 11014:2009, *Safety data sheet for chemical products - Content and order of sections*

IPC TM-650 TM 2.5.5.5, *Stripline Test for Permittivity and Loss Tangent (Dielectric Constant and Dissipation Factor) at X-Band*

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