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GB/T 5169.11-2017 / IEC 60695-2-11:2014

Replacing GB/T 5169.11-2006

Fire hazard testing for electric and electronic products - Part 11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)

[IEC 60695-2-11:2014, Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT), IDT]

电工电子产品着火危险试验 第 11 部分：灼热丝/热丝基本试验方法 成品的灼热丝可燃性试验方法(GWEPT)

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Issued by: General Administration of Quality Supervision, Inspection and Quarantine;

Standardization Administration Committee.

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Foreword

GB/T 5169 "Fire hazard testing for electric and electronic products" consists of the following parts:

- *Part 1: Terminology concerning fire tests*;
- *Part 2: Guidance for assessing the fire hazard - General guidelines*;
- *Part 3: Guidance for the preparation of requirements and test specifications for assessing fire hazard of electronic parts*;
- *Part 4: Test methods - Glow-wire ignitability test on materials*;
- *Part 5: Test flames - Needle test method - Apparatus, confirmatory arrangement and guidance*;
- *Part 6: Test method of bad connection with heater*;
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- *Part 8: Examples of fire hazard assessment procedures and interpretation of results - Combustion characteristics and survey of test methods for their determination*;
- *Part 9: Guidance for Assessing the Fire Hazard - Pre-selection Testing Procedures - General Guidelines*;
- *Part 10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure*;
- *Part 11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products*;
- *Part 12: Glowing/Hot-wire Based Test Methods - Glow-wire Flammability Index (GWFI) Test Method for Materials*;
- *Part 13: Basic test methods for glowing filament/hot wire - Test methods for glow wire ignition temperature (GWIT)*;
- *Part 14: Test flames - 1 kW nominal pre-mixed flame - Apparatus, confirmatory test arrangement and guidance*;
- *Part 15: Test flames - 500 W flames - Apparatus and conformational test methods*;
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- *Part 17: Test flames - 500W flame test method*;

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- *Part 33: Guidelines of fire hazard assessment guidelines - Ignitability - General*;

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- *Part 36: Corrosion damage effects of fire effluent - Summary and relevance of test methods*;

- *Part 38: Toxicity of fire effluent - Summary and relevance of test methods*;

- *Part 39: Toxicity of fire effluent - Use and interpretation of test results*;

The Chinese document which has consistency with the international normative reference in this Part is as follows:

- GB/T 5169.10-2017, *Fire hazard testing for electric and electronic products - Part 10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure* (IEC 60695-2-10:2013, IDT)

- GB/T 16499-2008, *The Preparation of safety publication and the use of basic safety publications and group safety publications* (neq IEC Guide 104:1997)

- GB/T 20002.4-2015, *Drafting for special aspects in standards - Part 4: Safety aspects for their inclusion in standards* (ISO/IEC Guide 51:2014,MOD)

This Part made the following editorial modifications:

- to be consistent with the existing standard series, changed the standard name to "Fire hazard testing for electric and electronic products - Part 11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)".

This Part was proposed by China Electrical Equipment Industry Association.

This Part shall be under the jurisdiction of National Technical Committee on Electrical and Electronic Products Fire Hazard Test of Standardization Administration of China (SAC/TC 300).

Main drafting organization of this Part: China Electric Apparatus Research Institute Co., Ltd.

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Fire hazard testing for electric and electronic products - Part 11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)

1 Scope

This Part of GB/T 5169 specifies the test method for an end product. It simulates thermal stress through an electric heat source to represent the fire hazard.

This method is used to check: the ability of the end product to be exposed to an electric heat source to withstand ignition or to withstand flame propagation after ignition under specified test conditions. However, this Part does not currently contain fire hazard analysis for flammability areas and flame spread to other products.

This Part is intended for the Standards Committee to prepare standards in accordance with the principles set out in IEC Guide 104:2010 and ISO/IEC Guide 51:1999.

One of the tasks of the product standard committee is to use this series of standards wherever applicable. The requirements, test methods or test conditions of this Part shall not apply unless specifically mentioned or listed in the relevant standards.

2 Normative references

The following referenced documents are indispensable for the application 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 60695-2-10, *Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure*

IEC Guide 104, *The preparation of safety publications and the use of basic safety publications and group safety publications*

ISO/IEC Guide 51, *Safety aspects - Guidelines for their inclusion in*

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