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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5169.17-2017

**Fire hazard testing for electric and electronic products -- Part
17: Test flames--500 W flame test method**

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Table of Contents

Foreword

Introduction

1 Scope

2 Normative references

Foreword

GB/T 5169 "Ignition Hazard Test for Electrical and Electronic Products" consists of the following components.

--- Part 1. Fire test terminology;

-- Part 2 . General guidelines for the assessment of fire hazards ;

--- Part 5. Test flame needle flame test method device, confirm test method and guide;

--- Part 9 . Guidelines for the assessment of fire hazards -- General rules for preselection test procedures ;

--- Part 10. Glow wire/hot wire basic test methods Glow wire apparatus and general test methods;

Part 11 . Glow wire/hot wire basic test methods Glow wire flammability test method for finished products (GWEPT);

Part 12 . Glowing/hot wire basic test methods Glow - wire flammability index (GWFI) test method for materials;

--- Part 13. Glow wire/hot wire basic test methods Glow wire light-off temperature (GWIT) test method for materials;

--- Part 14. Test flame 1kW nominal premixed flame apparatus, confirmatory test methods and guidelines;

--- Part 15. Test flame 500W flame device and confirmation test method;

--- Part 16. Test flame 50W horizontal and vertical flame test methods;

--- Part 17. Test flame 500W flame test method;

--- Part 18. General principles of toxicity of combustion streams;

--- Part 19. Abnormal thermal moulding stress release deformation test;

--- Part 20. Summary and correlation of test methods for flame surface propagation;

- Part 21. Test methods for abnormal hot ball pressure;
- Part 22. Test flame 50W flame device and confirmation test method;
- Part 23. Test flame tubular polymeric material 500W vertical flame test method;
- Part 24 . Guidelines for the assessment of fire hazards ; insulating liquids ;
- Part 25. General rules of smoke blur;
- Part 26. Smoke fuzzing test method outline and correlation;
- Part 27. Smoke fuzzy small-scale static test method Instrument description;
- Part 28. Smoke obfuscation small-scale static test method materials;
- Part 29. General heat release;
- Part 30. Summary and correlation of heat release test methods;
- Part 31 . General flame spread ;
- Part 32. Heat release of heat-release insulating liquids;
- Part 33 . Guidelines for the assessment of fire hazards -- General guidelines for flammability ;
- Part 34 . Guidance for assessing the dangers of fire ignition . Summary and relevance of flammability test methods ;
- Part 35 . General hazards of corrosion hazards of combustion streams ;
- Part 36 . Summary and correlation of test methods for corrosion hazard of combustion streams ;
- Part 38. Summary and correlation of toxicity testing methods for combustion streams;
- Part 39. Use and description of the results of the toxicity test of combustion streams;
- Part 40. Toxicity and toxicity assessment apparatus and test methods for combustion streams;
- Part 41. Calculation and description of test results for toxicity assessment of the combustion stream;
- Part 42. Guidelines for test flame verification tests;
- Part 44. Guidelines for assessing the dangers of a fire. Fire hazard assessment.

This section is part 17 of GB/T 5169.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This Part replaces GB/T 5169.17-2008 "Electrical and Electronic Products Fire Hazard Test

Part 17. Test Flame 500W Fire

Flame test method, compared with GB/T 5169.17-2008, the main technical changes are as follows.

- Changed the chapter on normative references (see Chapter 2,.2008 Edition, Chapter 2);
- Revised part of the terms and definitions (see Chapter 3, Chapter 3 of the.2008 Edition);
- Modify the "sample" requirements (see Chapter 7,.2008 Edition, Chapter 7);
- Revised the layout of the "Test Procedures" chapter and revised the statement of the 5V combustion rating method (see Chapter 8,.2008 Edition)

Chapter 8);"

- Added "an example of flame application" "5V sample gauge (example)" diagram (see Figure 5, Figure 6);
- Deleted the "Test Method Accuracy" appendix (2008 Edition Appendix A);
- Added an appendix to "Detailed requirements for flame application points" (see Appendix A).

This section uses the translation method identical to the use of IEC 60695-11-20.2015 "Ignition Hazard Test Part 11-20. Test Flame 500W

Flame test method."

The Chinese documents that are consistent with the normatively quoted international documents in this section are as follows.

---GB/T 5169.15-2015 Fire hazard test for electric and electronic products Part 15. Test flame 500W flame

Apparatus and confirmatory test method (IEC 60695-11-3.2012, IDT)

---GB/T 5169.16-2017 Fire hazard test for electric and electronic products Part 16. Test flame 50W Horizontal and vertical

Straight flame test method (IEC 60695-11-10.2013, IDT)

---GB/T 5471-2008 Plastic Thermoset Plastic Specimen Compression (ISO 295.2004, IDT)

---GB/T 9352-2008 Plastic Thermoplastic Material Specimen Compression (ISO 293.2004, IDT)

---GB/T 16499-2008 Preparation of safety publications and application of basic safety publications and multi-distribution shared safety publications

Guidelines (neq IEC Guide 104.1997)

--- Drafting of specific content in the GB/T 20002.4-2015 standard. Part 4. Content involving

security in the standard (ISO /

IEC Guide51.2014,MOD)

This section made the following editorial changes.

--- In keeping with the existing standard series, the standard name is changed to "Ignition hazard test for electric and electronic products - Part 17. Test flame 500W Flame Test Method."

This part is proposed by the China Electrical Appliance Industry Association.

This part is under the jurisdiction of the National Standardization Technical Committee for Fire and Hazard Testing of Electrical and Electronic Products (SAC/TC300).

This section is responsible for drafting. China Electric Apparatus Research Institute Co., Ltd.

This section participated in the drafting. Dongguan Entry-Exit Inspection and Quarantine Bureau Inspection and Quarantine Comprehensive Technology Center, Guangdong Yuanrong New Materials Co., Ltd.

Beijing Territor Testing Technology Service Co., Ltd., Wenzhou Yaohua Telecom Co., Ltd., Guangdong Entry-Exit Inspection and Quarantine Bureau Inspection and Quarantine Technology

Center, Weikai Detection Technology Co., Ltd., Zhongjiayuan (Beijing) Testing & Certification Co., Ltd., Shenzhen Metrology and Quality Inspection Institute, China Electronics

Technical Standardization Institute, Wuxi Sunan Test Equipment Co., Ltd., Zhuhai Gree Electric Co., Ltd., and the Ministry of Industry and Information Technology

Five Institute, Shandong Province Product Quality Inspection Institute.

Introduction

All electrical and electronic products are designed to take into account fire risk and potential fire hazards. The design of components, circuits and equipment as well as

The purpose of the screening of materials is to be able to ignite potential fires under normal operating conditions and in reasonably foreseeable abnormal use, failure and failure.

The risk is reduced to an acceptable level. Fires involving electric and electronic products may also be caused by non-electrical sources of external ignition. Overall risk assessment

Estimates should consider this factor.

The purpose of the IEC 60695 series of standards is to save people and property by