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

GB/T 5169.22-2015

Replacing GB/T 5169.22-2008

**Fire hazard testing for electric and electronic products -- Part
22: Test flames. 50 W flame -- Apparatus and confirmation test
method**

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Foreword

GB/T 5169 "Fire hazard testing for electric and electronic products" have or plan to release the following sections.

- Part 1. Terminology concerning fire tests;
- Part 2. Guidance for assessing the fire hazard - General;
- Part 5. Test flames - Needle-flame test methods for confirming test methods and guidelines;
- Part 9. Guidance for assessing the fire hazard of preselection testing procedures - General;
- Part 10. Glowing/hot wire based test methods - Glow - wire apparatus and common test procedure;
- Part 11. Glowing/hot wire based glow wire flammability test methods of the finished product;
- Part 12. Glowing/hot wire based test methods for materials glow wire flammability index (GWFI) test methods;
- Part 13. Glowing/hot wire based test methods - Glow - wire ignition temperature materials (GWIT) test methods;
- Part 14. Test flames - 1kW nominal pre-mixed flame - Apparatus, confirmatory test arrangement and guidance;
- Part 15. Test flames - 500W flames - Apparatus and confirmation test methods;
- Part 16. Test flames - 50W horizontal and vertical flame test methods;
- Part 17. Test flames - 500W flame test methods;
- Part 18. General toxic combustion stream;
- Part 19. Abnormal heat - Mould stress relief distortion test;
- Part 20. Surface spread of flame test methods - Summary and relevance;

- Part 21. Abnormal heat - Ball pressure test;
- Part 22. Test flames - 50W flames - Apparatus and confirmation test methods;
- Part 23. Test flames tubular material 500W vertical flame test methods for the polymerization;
- Part 24. Guidance for assessing the fire hazard insulating liquid;
- Part 25. Smoke obscuration - General;
- Part 26. Smoke obscuration - Summary and relevance of test methods;
- Part 27. Smoke obscuration - Small-scale static test instrument described;
- Part 28. Smoke obscuration - Small-scale static test material;
- Part 29. Heat release - General;
- Part 30. Heat release - Summary and relevance of test methods;
- Part 31. Surface spread of flame - General;
- Part 32. Heat release heat insulating fluid is released;
- Part 33. Guidance for assessing the fire hazard from flammable General;
- Part 34. Guidance for assessing the fire hazard from flammable Test methods - Summary and relevance;
- Part 35. General corrosion of combustion flow hazards;
- Part 36. corrosive combustion flow hazards Summary and relevance of test methods;
- Part 38. Toxicity Test Methods for combustion flows Summary and relevance;
- Part 39. Toxicity test results illustrate the use and combustion stream;
- Part 40. Toxic poison flow combustion efficiency device and test methods for assessment;
- Part 41. Toxicity toxic combustion flow calculation and assessment of the effectiveness of the test results described;
- Part 42. Test flames Confirmation Test Guidelines;
- Part 44. Guidance for assessing the fire hazard fire hazard assessment.

This section GB/T 5169 of Part 22.

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

This Part replaces GB/T 5169.22-2008 "Fire hazard testing for electric and electronic products - Part 22. Test flames - 50W flames

Apparatus and confirmation test methods ", compared with the GB/T 5169.22-2008 main technical changes are as follows.

--- An increase of some terms and definitions (see Chapter 3, Chapter 3, 2008 edition);

--- Test will confirm the initial temperature of the copper block by "100 degrees C +/- 5 degrees C" to "100 degrees C +/- 2 degrees C" (see 4.2.7, 4.4.1 and 4.4.2,

The 2008 edition 4.2.7, 4.4.1 and 4.4.2);

--- Added for each confirmatory test should be carried out "three times" Test emphasis (see 4.4.2 and 4.4.3, the 2008 version 4.4.2 and 4.4.3.);

--- Deleted all references to Method B and Method C (2008 edition Chapter 5, Chapter 6, Appendix B and Appendix C);

This section uses the translation method is equivalent to using IEC 60695-11-4:2011 "Fire hazard testing - Part 11-4. Test flames - 50W

Fire apparatus and confirmation test methods. "

This part made the following editorial changes.

--- Consistent with the existing standard series, the standard name will be changed to "Fire hazard testing for electric and electronic products - Part 22. Test flames

50W flames - Apparatus and confirmation test methods ";

--- Deleted the last two paragraphs of Chapter 1 of informative content;

--- The Chapter 2 Guidelines for the preparation of international standards IEC Guide 104:1997 and ISO /IEC Guide 51:1999 to "refer to the text offer".

This part is proposed by the China Electrical Equipment Industrial Association.

This section hazard testing Standardization Technical Committee (SAC/TC300) is administered by the National Electrical and Electronic Products fire.

This section is responsible for drafting units. China Electric Apparatus Research Institute Limited.

This section participated in the drafting unit. China Household Electrical Appliances Research Institute, Dongguan City, the Hua Electronic Technology Co., CVC Detection Technology Co.,

Division, the China Quality Certification Center, the Guangdong Entry-Exit Inspection and Quarantine Bureau Technology Center, the Ministry of Industry and Information Technology Institute of Electronics V, North

Beijing Terrett Detection Technology Services Co., Ltd., Zhuhai Gree Electric Co., Sichuan Fire Research Institute of Ministry of Public Security.

Introduction

Fire hazard testing for electric and electronic products, the best way is to faithfully reproduce the actual conditions. But in most cases it is impossible.

Therefore, the best practice to simulate the actual effect occurs in accordance with the reality as closely as possible to Fire hazard testing for electric and electronic products.

We developed a series of available standard test flame by the Advisory Committee on Safety (ACOS) initiated the work, including all products Commission

Members will be required to test the flame power range. IEC 60695-11-5 describes the needle flame, GB/T 5169.15-2015 described are two

500W flame, GB/T 5169.14-2007 description is 1kW flame.

This section gives a description of the test flame produces 50W desired device, and verify whether the flame confirmation method described requirements.

GB /Z5169.42-2013 is given a confirmation method pilot test of the flame.

The first edition of this section describes the three methods (A, B and C) generating 50W test flame, so that the user determine the selection order.

Two methods which have now been withdrawn, as shown in the following table.

50W test flame type gas Flame

Approximate total height of the flame

mm

A premixed methane 20

B revocation

C revoked

Part 4 of this chapter describes the method of initial approach A. Its single formula feed pipe, a gas back pressure regulating needle valve to adjust the combustion tube

Flow meter and regulate the flow of gas combustion air inlet tube produces 50W nominal test flame method.

This method of flame methane fuel, the use of some countries has been used for many years of strict rules models burners.

The development of this method is that the pre-technology improvements.