



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

GB/T 5169.11-2017

**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)**

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Foreword

GB/T 5169 "Electrical and Electronic Products Fire Hazard Test" consists of the following parts.

- Part 1. Terminology for ignition test;
- Part 2. General guidelines for the assessment of fire hazard;
- Part 5. Test flame test method, test method and guide;
- Part 9. General rules for pre-selection test procedures for fire hazard assessment guidelines;
- Part 10. Glow wire/hot wire basic test method Glow wire device and general test method;
- Part 11. Glow wire/hot wire basic test method Glow wire flammability test method (GWEPT);
- Part 12. Glow wire/hot wire basic test method Glow wire flammability index (GWFI) test method;
- Part 13. Glow wire/hot wire basic test method Glow wire light-off temperature (GWIT) test method for materials;
- Part 14. Test flame 1kW nominal premixed flame device, validation test method and guidelines;
- Part 15. Test flame 500W flame device and confirmation test method;
- Part 16. Test flame 50W horizontal and vertical flame test method;
- Part 17. Test flame 500W flame test method;
- Part 18. General principles of toxicity of combustion streams;
- Part 19. Unnormal thermal compression stress release deformation test;
- Part 20. Summary and correlation of test methods for flame surface spread;
- Part 21. Unusual hot ball pressure test method;
- Part 22. Test flame 50W flame device and confirmation test method;
- Part 23. Test flame tube-shaped polymeric material 500W vertical flame test method;
- Part 24. Fire hazard assessment guidelines for insulating liquids;
- Part 25. General rules for smoke blur;

- Part 26. Summary and correlation of smoke fuzzing test methods;
- Part 27. Smoke fuzzy small-scale static test method instrument description;
- Part 28. Smoke fuzzy small-scale static test method materials;
- Part 29. General rules for heat release;
- Part 30. Summary and correlation of heat release test methods;
- Part 31. General rules for the spread of flame surfaces;
- Part 32. Heat release of heat release insulating liquids;
- Part 33. Fire hazard assessment guidelines for general ignitability;
- Part 34. Fire hazard assessment guidelines Summary and correlation of ignitability test methods;
- Part 35. General rules for corrosion hazards of combustion streams;
- Part 36. Summary and correlation of test methods for corrosion hazards of combustion flows;
- Part 38. Summary and correlation of toxicity test methods for combustion streams;
- Part 39. Use and description of the toxicity test results of the combustion stream;
- Part 40. Toxic toxicological assessment devices and test methods for combustion streams;
- Part 41. Calculation and description of test results for toxic toxicity assessment of combustion streams;
- Part 42. Test flame confirmation test guidelines;
- Part 44. Fire hazard assessment guidelines for fire hazard assessment.

This part is the 11th part of GB/T 5169.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB/T 5169.11-2006 "Electrical and Electronic Products Fire Hazard Test Part 11. Glow Wire/Hot Wire Basic Test

The test method for the glow ignitability of finished products is compared with GB/T 5169.11-2006. The main technical changes are as follows.

- Increased the role and purpose of the test method (see Chapter 1, Chapter 1 of the.2006 edition);
- Added "small parts" and "ignorable quality samples" without the explicit provisions of this test (see 4.1);

- Increased the requirement for the distance between the bottom layer and the sample under unknown conditions (see Chapter 5, Chapter 5 of the.2006 edition);
- Increased the provisions of the test conditions (see 7.2, 7.3,.2006 edition of Chapter 8);
- Move the "severe rating" as the test temperature requirement to the chapter of the test procedure (see 8.2, Chapter 6 of the.2006 edition);
- Removed the "initial measurement" of the visual inspection of the sample (Chapter 9 of the.2006 edition);
- Added provisions for the format of test reports (see Chapter 11);
- Amend Appendix A "Glow Wire Test Guidelines" to "GWEPT Temperature Recommendations" guide, improve the method of selecting test temperature (See Appendix A, Appendix A of the.2006 edition).

This section uses the translation method equivalent to IEC 60695-2-11.2014 "Fire hazard test Part 2-11. Glow wire/hot wire base

Glow wire flammability test method (GWEPT) of the finished test method.

The documents of our country that have a consistent correspondence with the international documents referenced in this part are as follows.

--- GB/T 5169.10-2017 Electrical and electronic products - Fire hazard testing - Part 10. Glowing wire/hot wire basic test method

Glow wire device and general test method (IEC 60695-2-10.2013, IDT)

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

Guidelines (neq IEC Guide 104..1997)

---GB/T 20002.4-2015 Drafting of specific content in the standard Part 4. Content related to safety in the standard (ISO /

IEC Guide 51..2014, MOD)

This section has made the following editorial changes.

--- In line with the existing standard series, change the standard name to "Electrical and Electronic Products Fire Hazard Test Part 11. Glow Wire /

Hot wire basic test method Glow wire flammability test method (GWEPT).

This part was proposed by China Electrical Equipment 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).