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

GB/T 5169.25-2018

Replacing GB/T 5169.25-2008

**Fire hazard testing for electric and electronic products -- Part
25: Smoke obscuration -- General guidance**

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Table of Contents

Foreword

Introduction

1 Scope

2 Normative references

3 terms and definitions, symbols

3.1 Terms and definitions

13943 Some terms and definitions in.2008.

3.2 symbol

4 Overview of smoke test methods

4.1 Fire and ignition model

Foreword

GB/T 5169 "Electrical and Electronic Products Fire Hazard Test" is divided into 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. abnormal heat ball pressure test;
- 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 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 25th 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 5169.25-2008 "Electrical and Electronic Products Fire Hazard Test Part 25. General Rules for Smoke Fuzzy", and

The main technical changes compared with GB/T 5169.25-2008 are as follows.

- Updated the chapter on normative references (see Chapter 2, Chapter 2 of the.2008 edition);
- Updated some terms and definitions (see 3.1,.2008 edition 3.1);
- Adjusted the layout of the "Static Methods and Dynamic Methods" chapter (see Chapter 6, Chapter 6 of the.2008 edition);
- Added the chapter content of the "SMOGRA Index" (see 6.2.4).

This section uses the translation method equivalent to the IEC 60695-6-1.2010 "Fire hazard test Part 6-1. Smoke Fuzzy General Rules".

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

- GB/T 5169.1-2015 Electrical and electronic products - Fire hazard testing - Part 1 . Fire test term (IEC 60695-4.

2012, IDT)

GB/T 5169.2-2013 Fire hazard testing for electric and electronic products - Part 2. General guide to fire hazard assessment

(IEC 60695-1-10..2009, IDT)

- GB/T 5169.26-2018 Electrical and electronic products - Fire hazard testing - Part 26

Relevance (IEC 60695-6-2.2011, IDT)

- GB/T 5169.44-2013 Electrical and electronic products - Fire hazard testing - Part 44. Fire hazard assessment guide

Risk assessment (IEC 60695-1-11.2010, IDT)

- GB/T 16499-2017 Preparation of electrical and electronic security publications and basic security publications and multi-disciplinary shared security publications

Application guidelines for substances (IEC Guide 104..2010, NEQ)

- GB/T 20002.4-2015 Standardization Work Guide Part 4. Contents related to safety in the standard (ISO /IEC Guide

51.2014, MOD)

This section also made the following editorial changes.

--- In line with the existing standard series, change the name of this part to "Electrical and Electronic Products Fire Hazard Test Part 25. Smoke Blur

General.

--- Modify the editorial error of the transmittance data of Figure C.1, from "0" to "100".

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).

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Introduction

Any circuit needs to take into account the danger of fire. The purpose of component design, circuit design, equipment design, and material selection is to reduce

The possibility of less fire, even in the case of foreseeable abnormal use, failure and failure.

Electrical and electronic products that were originally victims of fires may contribute to the fire. One of the increased fire hazards is the release of smoke, making it visible

Feel reduced and/or lost direction and cannot escape from the building or affect fire fighting.

Visibility is reduced due to the light absorption and light scattering effects of the smoke particles, making it difficult to find exit signs, doors and windows. Visibility usually

It refers to the distance from which the target cannot be seen. Visibility depends on many factors, but it has been determined that there is a measure between the extinction coefficient and the smoke.

Close relationship (see Appendix A).