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

GB/T 5169.28-2008

**Fire hazard testing for electric and electronic products -- Part
28: Smoke obscuration -- Small-scale static test -- Materials
(English Translation)**

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Foreword

GB/T 5169 "Fire hazard testing for electric and electronic products" is divided into the following sections.

--- GB/T 5169.1-2007 Fire hazard testing for electric and electronic products - Part 1. Terminology concerning fire tests (IEC 60695-4.

2005, IDT)

--- GB/T 5169.2-2002 Fire hazard testing for electric and electronic products - Part 2. Guidance for assessing the fire hazard - General (IEC 60695-1-1:1999, IDT)

--- GB/T 5169.3-2005 Fire hazard testing for electric and electronic products - Part 3. Electronic Components for assessing fire hazard Requirements and test specifications for the development of guidelines (IEC 60695-1-2. 1982, IDT)

--- GB/T 5169.5-2008 Fire hazard testing for electric and electronic products - Part 5. Test flames - Needle-flame test method Means for confirmatory test methods and guidance (IEC 60695-11-5:2004, IDT)

--- GB/T 5169.7-2001 Fire hazard testing for electric and electronic products Test methods Diffusion type and premixed type flame test the method (idt IEC 60695-2-4/0.1991)

- GB/T 5169.9-2006 Fire hazard testing for electric and electronic products - Part 9. Guidance for assessing the fire hazard of pre-trial Test procedure used (IEC 60695-1-30:2002, IDT)
- GB/T 5169.10-2006 Fire hazard testing for electric and electronic products - Part 10. Glowing/hot-wire based test methods Glow-wire apparatus and common test procedure (IEC 60695-2-10:2000, IDT)
- 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 finished products (IEC 60695-2-11:2000, IDT)
- GB/T 5169.12-2006 Fire hazard testing for electric and electronic products - Part 12. Glowing/hot-wire based test methods Glow-wire flammability test method for materials (IEC 60695-2-12:2000, IDT)
- GB/T 5169.13-2006 Fire hazard testing for electric and electronic products - Part 13. Glowing/hot-wire based test methods Glow-wire ignitability test method for materials (IEC 60695-2-13:2000, IDT)
- GB/T 5169.14-2007 Fire hazard testing for electric and electronic products - Part 14. Test flames - 1kW nominal premixed Bonded flame device, confirmatory test arrangement and guidance (IEC 60695-11-2:2003, IDT)
- GB/T 5169.15-2008 Fire hazard testing for electric and electronic products - Part 15. Test flames - 500W flames Apparatus and confirmation test methods (IEC/T S60695-11-3:2004, IDT)
- GB/T 5169.16-2008 Fire hazard testing for electric and electronic products - Part 16. Test flames - 50W horizontal and vertical Direct flame test methods (IEC 60695-11-10:2003, IDT)
- GB/T 5169.17-2008 Fire hazard testing for electric and electronic products - Part 17. Test flames - 500W flame test Test methods (IEC 60695-11-20:2003, IDT)
- GB/T 5169.18-2005 Fire hazard testing for electric and electronic products - Part 18. A fire in the electric and electronic products Minimize the risk of poisoning General guidelines (IEC 60695-7-1:1993, IDT)
- GB/T 5169.19-2006 Fire hazard testing for electric and electronic products - Part 19. Abnormal heat - Mould stress relief becomes Shaped test (IEC 60695-10-3:2002, IDT)
- GB/T 5169.20-2006 Fire hazard testing for electric and electronic products - Part 20. Surface spread of flame test method shall to and relevance (IEC/T S60695-9-2:2001, IDT)
- GB/T 5169.21-2006 Fire hazard testing for electric and electronic products - Part 21. Abnormal heat - Ball pressure test (IEC 60695-10-2:2003, IDT)

--- GB/T 5169.22-2008 Fire hazard testing for electric and electronic products - Part 22. Test flames - 50W flames installed GB/T 5169.28-2008/IEC/TS60695-6-31:1999 Set and confirm the test methods (IEC/T S60695-11-4:2004, IDT)

--- GB/T 5169.23-2008 Fire hazard testing for electric and electronic products - Part 23. Test flames tubular polymeric material 500W vertical flame test methods (IEC/T S60695-11-21:2005, IDT)

--- GB/T 5169.24-2008 Fire hazard testing for electric and electronic products - Part 24. Guidance for assessing the fire hazard insulation Liquid (IEC/T S60695-1-40:2002, IDT)

--- GB/T 5169.25-2008 Fire hazard testing for electric and electronic products - Part 25. Smoke obscuration - General (IEC 60695-6-1:2005, IDT)

--- GB/T 5169.26-2008 Fire hazard testing for electric and electronic products - Part 26. Smoke obscuration - Summary and Test Methods Correlation (IEC/T S60695-6-2:2005, IDT)

--- GB/T 5169.27-2008 Fire hazard testing for electric and electronic products - Part 27. Smoke obscuration - Small-scale static test Description of the apparatus (IEC/T R60695-6-30:1996, IDT)

--- GB/T 5169.28-2008 Fire hazard testing for electric and electronic products - Part 28. Smoke obscuration - Small-scale static test Methodological materials (IEC/T S60695-6-31:1999, IDT)

--- GB/T 5169.29-2008 Fire hazard testing for electric and electronic products - Part 29. Heat release - General (IEC 60695-8-1:2008, IDT)

--- GB/T 5169.30-2008 Fire hazard testing for electric and electronic products - Part 30. Test methods for heat release and summary Correlation (IEC/T S60695-8-2:2008, IDT)

--- GB/T 5169.31-2008 Fire hazard testing for electric and electronic products - Part 31. Surface spread of flame - General (IEC 60695-9-1:2006, IDT) this section GB/T 5169 Part 28.

This section identical with IEC/T S60695-6-31:1999 "Fire hazard testing - Part 6-31. Smoke obscuration - Small-scale static test the method of test material "(English version), but according to GB/T 20000.2-2001" Standardization Guide Part 2. Adoption of International Standards Compliance the "in 4.2b) and provisions of 5.2 a small amount of editorial changes were made.

Appendix A of this section and Appendix B is an informative annex.

This part of the National Fire hazard testing for electric and electronic products Standardization Technical Committee (SAC/TC300) and focal points.

This section from Guangzhou CVC Testing Institute is responsible for drafting, Shenzhen

Academy of Metrology and Quality Inspection, China Electric Apparatus Research Institute, Guangdong Entry-Exit Inspection and Quarantine Bureau Technology Center, Wuhan Institute of external computer equipment, Shenzhen Entry-Hill Eastern Province Product Quality Supervision and Inspection Institute participated in the drafting.

Introduction

Almost all (including for electric and electronic products) non-metallic materials when heated will produce smoke. Tobacco is one of the risk of fire, smoke Cause human and material damage and obstruct fire fighting. Therefore, reducing the rate of fire during the material/product can reduce smoke generation equipment Damage conducive evacuation and emergency services to intervene.

This section provides the use of GB/T 5169.27-2008 instrument described electric and electronic products in the material was measured to produce smoke blur experiment method.

GB/T 5169.28-2008/IEC/TS60695-6-31:1999 Fire hazard testing for electric and electronic products Part 28. Smoke obscuration - Small-scale static test -material

1 Scope

GB/T 5169 provisions of this section under certain experimental conditions, materials in confined spaces (ie no ventilation) perpendicular to the presence or absence of exposure Measurement of optical density when pilot flame heat radiation generated by the smoke.

This section applies to planar solid electrical and electronic products used in non-metallic material samples.

This method is not used to test the thermal non-planar products, such as wire and cable insulation, because such samples can not get a satisfactory Flux distribution.

From the current perception of the actual fire point of view, this method may not be used under the direct impact of the heat flux will melt and flow away without distributing Material smoke.

2 Normative references

The following documents contain provisions which, through reference to GB/T 5169 to the present, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section the latest version of the file research protocols following reference. For undated reference documents, the latest versions apply to this section.

GB/T 5169.1-2007 Fire hazard testing for electric and electronic products - Part 1.