

ICS 75.160
CCS C 80



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

GB/T 5332-2007

Replacing GB/T 5332-1985

**Method of test for ignition temperature of flammable liquids and
gases**

可燃液体和气体引燃温度试验方法

(English Translation)

Issued on: July 2, 2007

Implemented on: January 1, 2008

Issued by: Standardization Administration of China

Table of Contents

- Foreword
- 1 Scope
- 2 Terms and definitions
- 3 Test Overview
- 4 Test device
 - 4.1 Test flask (flask)
 - 4.2 Furnace

Foreword

This standard is identical with IEC 60079-4. 1975 "explosive gas atmospheres Electrical Equipment Part 4 square test for ignition temperature Law "second edition (in English and/or French), including its amendments IEC 60079-4-Amd1.1995.

This standard is equivalent translation IEC 60079-4. 1975.

For ease of use, this standard made the following editorial changes.

- a) "this International Standard" be replaced by "this standard";
- b) use a decimal point instead of a decimal comma " , " . " , " ;
- c) Remove the preface to the international standards;
- d) Remove the suspension of paragraph 4;
- e) increased 4.2 tables in table number, table name;
- f) increased 4.4.1 and 4.4.2 of the section heading;
- g) increased 5.1 bar title;
- h) of the content to 5.2 5.2.1.

This standard replaces GB/T 5332-1985 "Test method for temperature ignition of flammable liquids and gases." this standard and GB/T 5332-1985 compared to the major differences are as follows.

--- According to IEC 60079-4:1995 "Test Methods for repair orders ignition temperature 1" in Appendix A to asbestos insulation materials;

--- In Appendix A, adding another furnace (Furnace # 2) and the corresponding description of FIG.

Appendix A of this standard is an informative annex.

Please note that some of the content of this standard may involve patents. The standard release mechanism should not bear the responsibility to identify these patents.

The standard proposed by the People's Republic of China Ministry of Public Security.

This standard by the National Standardization Technical Committee on Fire First Technical Committee (SAC/TC113/SC1) centralized.

This standard was drafted. Tianjin Fire Research Institute of Ministry of Public Security.

1 Scope

This standard specifies the method for determination of chemical purity flammable liquid and vapor gas ignition temperature (self-ignition temperature) atmospheric pressure air.

2 Terms and definitions

The following terms and definitions apply to this standard.

According to the method specified in this standard test, the lowest temperature when ignition occurs.

Flammable liquids or gases in the test of the flask were heated, the occurrence of visible flame and/or explosive chemical reaction, this reaction Delay time of less than 5min.

Instantaneous sample is completely injected into the flask to the time required for ignition occurs.

3 Test Overview

After exposure to a volume of 200mL conical flask was heated to a certain temperature, the flammable liquid or gas sample injection amount of the cone Shaped flask, the flask in the dark room and observed whether ignition occurs. By using different temperatures and repeat the test sample amount, the ignition occurs the lowest temperature of the flask as the sample in air at atmospheric pressure ignition temperature.

4.1 Test flask (flask)

Use a volume of 200mL Erlenmeyer flask made of borosilicate glass. Test and final test shall be set for each sample Use chemically cleaned by clean flask.

When the ignition temperature of the sample exceeds a borosilicate glass flask or a softening point of the sample flasks chemical corrosion, can be quartz flask or a metal flask, an acknowledgment in the test report.

4.2 Furnace

The flask was heated uniformly using a heating furnace. It gives the example of furnace suitable for this purpose in Appendix A.

When tested in accordance with this standard test procedure, if the measured substances in Table 1 in the ignition temperature of the error range given in Chapter 7 the, the flask experiment can be considered to be uniformly heated, the temperature selected measurement location is suitable. Purity used test specimens shall not Less than 99.9%.

Table 1 furnace ignition temperature of the material verification

Combustible ignition temperature/°C N-heptane Ethylene GB/T 5332-2007/IEC 60079-4.
1975