

ICS 43.020

JT

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

JT/T 1095-2022

**Flame resistance of commercial bus interior materials
(English Translation)**

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1 Scope

This document specifies the technical requirements, test methods, implementation transition period requirements, for the flame retardant properties of interior materials for commercial bus.

This document is applicable to the evaluation of flame retardant properties of grade B and grade III bus interior materials, in category M2 and category M3.

This document does not apply to school buses.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, for dated references, only the version corresponding to the date applies to this document; for undated references, the latest version (including all amendments) applies to this document.

GB/T 2406.2-2009 Plastics - Determination of burning behavior by oxygen index -

Part 2.Ambient-temperature test

GB/T 5454 Textiles-Burning behavior - Oxygen index method

GB 8410 Flammability of automotive interior materials

GB/T 8626 Test method of flammability for building materials

GB/T 8627 Test method for density of smoke from the burning or decomposition of building materials

GB/T 10707 Rubber - Determination of the burning

3 Terms and definitions

The terms and definitions, as defined in GB/T 15089 and JT/T 1094, as well as the following terms and definitions, apply to this document.

3.1

Oxygen index

Under the specified test conditions, when the mixed gas of oxygen and nitrogen at a temperature of $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$ is introduced, the minimum oxygen concentration, that can just maintain the combustion of the material, expressed in volume fraction.

[Source. GB/T 2406.2-2009, 3.1, modified]

3.2

Density of smoke

The measure of the amount of smoke, which is produced by a material, under specified test conditions, expressed by the attenuation of light intensity passing through the smoke.

[Source. GB 38262-2019, 3.5]

3.3

Smoke toxicity

The degree of damage or injury, which is caused by the toxic and harmful substances in the smoke.

[Source. GB 8624-2012, 3.19, modified]

3.4

Melting behavior

The characteristics of melting droplets, foaming and other phenomena of material, under the impact of thermal radiation.

4.1 Material classification

The interior materials of commercial bus shall be classified according to the applied materials in Table 1, included interior materials, used parts.

4.2 Requirements for flame retardant properties

4.2.1

The flame retardant characteristics of interior materials of commercial bus shall meet the requirements in Table 2.

4.2.4

If the interior parts contain cavities, meanwhile the parts without cavities do not meet the minimum size requirements, the test can be exempted.

4.2.5

When the interior parts can be separated into single material and composite material, the test results of the separated materials shall be judged according to the requirements in Table 2.

4.2.6

When interior materials of the same material, process, thickness, manufacturer are used in multiple parts, the technical requirements shall cover the maximum limit requirements for all parts of the interior material.

5.1 Sampling of test samples

Sampling shall be carried out, according to the provisions of Appendix A.

5.2 Horizontal combustion

Carry out the test, according to the provisions of GB 8410.

5.3 Vertical combustion

Carry out the test, according to the provisions of GB/T 32086.

5.5 Smoke density

Carry out the test, according to the provisions of GB/T 8627. The test result is expressed by the smoke density level.

5.6 Combustion performance level

Carry out the test, according to the provisions of GB/T 11785 and GB/T 8626.

5.7 Levels of smoke production characteristics

Carry out the test, according to the provisions of GB/T 11785.

5.8 Smoke toxicity level

Carry out the test, according to the provisions of GB/T 20285.

6 Transition period requirements for implementation

Models that have obtained type approval will be implemented on the 13th month, from the date of implementation of this document.

Appendix A (Normative)

Sampling requirements of test sample

A.1 Sampling method

A.1.1 Test samples can be cut directly from interior parts, according to the requirements of single material and composite material. When the sampling size is not satisfied, the raw materials can be used to make samples, that meet the standard size, according to the same process and production process.

A.1.2 When the interior parts are made of a single material, when the actual thickness is less than the thickness required in Table A.1, the thickness of the test sample is the actual thickness. When the actual thickness is greater than the thickness required in

Table A.1, use the interception method or the same process and production process, to make the sample strip conforming to the dimensions in Table A.1; meanwhile it needs to be stated in the report.

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