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

GB/T 40302-2021

**Plastics - Determination of burning behaviour of thin flexible
vertical specimens in contact with a small-flame ignition source**

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Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

The translation method used in this document is equivalent to ISO 9773.1998 "Testing the combustion performance of plastic vertical soft and thin specimens in contact with a small flame source.

Certainly".

The Chinese documents that have consistent correspondence with the normatively cited international documents in this document are as follows.

---GB/T 1844.1-2008 Plastic symbols and abbreviations Part 1. Basic polymers and their characteristic properties

(ISO 1043-1.2001, IDT);

---GB/T 2918-2018 Plastic specimen condition adjustment and test standard environment (ISO 291.2008, MOD).

This document was proposed by the China Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Plastics Standardization Technical Committee (SAC/TC15).

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1 Scope

1.1 This document specifies a small-scale screening procedure in the laboratory for comparing vertical soft and thin plastic specimens exposed to low-energy ignition sources

Relative combustion performance under the. It is suitable for testing by ISO 1210 method B due to distortion or shrinkage during ignition

Sample.

1.2 The provisions of this document apply to the method for measuring the afterglow and afterglow time of the sample.

1.3 The classification described in Appendix A can be used for quality control or pre-selection of product raw materials. The classification determined by this test method is only applicable

The material used in the measurement of the sample.

Note. The test results are affected by the material components, such as the concentration of pigments, fillers, and flame retardants.

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to that date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

GB/T 6379.2-2004 Measurement methods and accuracy of results (accuracy and precision)
Part 2.Determine standard measurement methods

The basic method of method repeatability and reproducibility (ISO 5725-2.1994, IDT)

ISO 291.2008 Plastic Specimen Condition Adjustment and Test Standard Environment
(Plastics-Standardatmospheresforconditioningandtesting)

ISO 1043-1:2001 Plastic symbols and abbreviations Part 1: Basic polymers and their characteristic properties (Plastics-

Symbols and abbreviated terms-Part 1: Basic polymers and their special characteristics)

ISO 1210 Plastics determine the combustion behavior of horizontal and vertical samples in contact with a small flame (50W) ignition source [Plastics-Deter-

mination of the burning behaviour of horizontal and vertical specimens in contact with a small flame (50W) ignition source]

ISO 10093 Plastics-Fire tests-Standard ignition sources

ASTM D5207-91 Standard Practice for Flame Calibration of 20mm and 125mm Tests for Small-scale Combustion Testing of Plastic Materials

(Standard practice for the calibration of 20mm and 125mm test flames for small-scale burning tests on plastic materials)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Afterflame

Under the specified test conditions, after removing the ignition source, the continuous flame of the material.