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

GB/T 45218-2025

**Dangerous goods - Test method for thermal explosion in the
package with self-reactive substances and organic peroxides**

危险货物 自反应物质和有机过氧化物包装件热爆炸试验方法

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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 for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Technical Committee for Hazardous Chemicals Management Standardization (SAC/TC251).

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Dangerous Goods Self-reactive substances and organic peroxides Thermal explosion test method for packages Warning---People who use this document should have practical experience in formal laboratory work. Special attention should be paid to the test process involving explosives.

The use of the equipment requires relevant qualifications and site conditions or entrusting an organization with relevant conditions to operate it. This document does not indicate all

possible safety hazards.

It is the user's responsibility to take appropriate safety and health measures.

1 Scope

This document describes the principles, equipment and materials, test preparation, test procedures, and test procedures for thermal explosion tests on packages of self-reactive substances and organic peroxides. Steps and results assessment.

This document is applicable to the assessment of the thermal explosion potential of self-reactive substances and organic peroxides in packages.

2 Normative references

GB/T 21535-2008

GB 30000.9-2013

GB 30000.16-2013

GB/T 30429

3 Terms and definitions

The terms and definitions defined in GB/T 21535-2008, GB 30000.9-2013 and GB 30000.16-2013 and the following terms and definitions apply This document.

3.1 explosion

In a very short time, a large amount of energy is released, high temperature is generated, and a large amount of gas is released, causing a chemical reaction or state change of high pressure in the surrounding area. phenomenon of.

[Source. GB/T 21535-2008, 2.14]

3.2 thermal explosion

When a substance is stimulated by heat, it undergoes a chemical reaction, releasing a large amount of energy, generating high temperatures, and releasing a large amount of gas, causing high pressure or The phenomenon of state change.

3.3 Organic peroxide

Liquid containing a divalent -OO- structure, which can be regarded as a derivative in which one or two hydrogen atoms of hydrogen peroxide have been replaced by organic groups solid or organic matter.