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

GB/T 45097.1-2024

**Safety of intelligent consumer product - Part 1: Hazard
identification**

智能消费品安全 第1部分：危害（源）识别

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Foreword

This document was issued on 28 November 2024 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 28 November 2024.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

1 Scope

GB/T 45097.1-2024 is Part 1 of the Chinese series on the safety of intelligent consumer products, and covers hazard identification. Product safety has always begun by listing the ways a product can hurt someone, but a connected product with a camera, a microphone and a learned behaviour extends that list into places the old checklists do not reach: harms that arise from information rather than energy, and from decisions the product makes rather than from a component failing. The standard sets the general principles and the classification of hazards, then the general process for identifying them - information preparation, feature analysis and hazard determination - with informative annexes on

methods for identifying information and ethical hazards, examples of such hazards, and worked examples of hazard identification for intelligent consumer products. It took effect on 28 November 2024.

This document provides the principles for hazard identification of the safety of intelligent consumer products, and the classification of hazards, and establishes the general process for hazard identification of the safety of intelligent consumer products, including information preparation, feature analysis, and hazard determination. This document is applicable to the hazard identification activities of intelligent consumer products.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 39011-2020, Consumer product safety - General principles for hazard identification

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

intelligence

The ability to possess human or human-like intelligence characteristics.

Note. Human or human-like intelligence characteristics are manifested in the fact that in the process of achieving a certain purpose, they will always experience one or more processes or process cycles of perception, decision-making, and execution, and improve their ability to achieve goals as well as their efficiency and effectiveness to achieve goals. It is believed in this document that, in embodying the human or human-like intelligence characteristics, the abilities and processes of perception, decision-making, execution and

learning therein are indispensable.

[Source. GB/T 28219-2018, 3.1]

3.2

consumer product

Mainly but not limited to products designed and produced for personal use, including product components, parts, accessories, instructions for use and packaging.

[Source. GB/T 35248-2017, 2.2]

3.3

safety

A state free from unacceptable risk.

[Source. GB/T 20002.4-2015, 3.14]

3.4

hazard

Potential source of harm.

[Source. GB/T 28803-2012, 3.2]

3.5

information hazard

Factors that may expose information to unauthorized, accidental or intentional access, disclosure, transmission, modification or destruction.

3.6

ethical hazard

Factors that violate the specific behavioral norms that need to be followed when dealing with the relationships between people, people and society, and people and nature.

4 General principles

4.1 Comprehensiveness

It covers the entire life cycle of intelligent consumer products, including design, production, packaging, storage, transportation, use and recycling, and conducts comprehensive identification from multiple dimensions such as physical hazard,

chemical hazard, information hazard, and ethical hazard.

4.2 Scientificity

According to the essential characteristics of the hazard, select scientific and effective identification methods to ensure the reliability and accuracy of hazard identification.

4.3 Systematicness

The identification process comprehensively considers laws and regulations, standards and specifications, economic development, technological changes, and concept improvement, maintains objectivity and transparency, and avoids subjective bias.

4.4 Dynamicity

According to technological advances and market changes, update hazard identification methods in a timely manner to respond to emerging hazards.

5 Hazard classification

According to the characteristic attributes of hazards of intelligent consumer products, the hazards of intelligent consumer products are divided into physical hazards, chemical hazards, information hazards and ethical hazards.

6 General process

The general process for identification of intelligent consumer products includes information preparation, feature analysis, and hazard determination, as shown in Figure 1. Among them, the process for identification of physical hazards and chemical hazards can also be established in accordance with the provisions of GB/T 39011-2020.

7.2 Information investigation

If it is considered necessary to verify the authenticity and completeness of the collected information, on-site investigations or other measures shall be arranged to further collect, verify and organize the information to maximize the effectiveness of the information required for hazard identification.

8 Feature analysis

8.1 Use object analysis.