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PEOPLE'S REPUBLIC OF CHINA**

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Textiles - Intelligent textiles - Terminology and classification

纺织品 智能纺织品 术语和分类

(English Translation)

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Foreword

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

1 Scope

This document defines the terminology and definitions of smart textiles and provides a classification of smart textiles.

This document applies to all types of smart textiles.

2 Normative references

This document has no normative references.

3.1 environment; surroundings

The context, objects, or conditions surrounding textile materials, textile products, or their users.

3.2 Intelligent textiles; smart textiles; interactive textiles

By applying technologies such as materials science, electronic information, sensing, and biomedicine to textiles, they can achieve reversible interactions with the environment.

Use functional textiles that can sense, respond to, and adapt to changes (stimuli) in the environment.

3.3 Textile system

Combination of textiles and non-woven components.

3.5 Electronic textiles

By embedding electronic components with sensing and communication functions into textiles, they can collect, analyze, and provide feedback on data, creating intelligent [technology/systems]. Textiles.

3.7 Colour-changing smart textile

Smart textiles that can change the absorption, transmission, or reflection of light in response to changes in the external environment, thus displaying different colors.

Note: Stimuli such as photochromism, thermochromism, pressure-induced color change, biochromism, and electrochromism.

3.8 Temperature-regulating smart textile

It can sense and respond to changes in ambient temperature, utilizing material phase changes, fluid temperature regulation technology, or electro-thermal energy conversion to control temperature. Smart textiles with temperature regulation.