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CCS C73

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 38306-2025

Replacing GB/T 38306-2019

Hand protection - Protective gloves against thermal risks

手部防护 防热伤害手套

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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". Drafting. This document replaces GB/T 38306-2019 "Hand Protection Gloves Against Heat Injuries". Compared with GB/T 38306-2019, except for the structure... Aside from adjustments and editorial changes, the main technical changes are as follows:

---The term "hole" has been added (see 3.5);

---The harmlessness requirement has been changed (see 4.1,.2019 version 4.1);

---The technical requirements for afterflame time for flame retardant performance level 1 have been changed (see Table 3, Table 3 in the.2019 version);

---Added visual inspection after performance testing of contact heat, convection heat, radiant heat, small amount of molten metal splash, and large amount of molten metal splash. Technical requirements (see 4.4.3~4.4.7);

---The flame resistance test requirements for surface materials of products at level 3 and above have been revised in the contact heat requirements (see 4.4.3,.2019 version). (4.4.3) added requirements for convective heat, radiative heat, small amount of molten metal splashing, and large amount of molten metal splashing for levels 3 and above. Flame resistance test requirements for surface materials of the above products (see 4.4.4~4.4.7);

---Added minimum length requirements and test methods for gloves (see

---Added pretreatment requirements for glove testing (see 5.1);

---The test methods for abrasion resistance, tear resistance, and glove removal time have been revised (see 5.2, 5.3, 5.5;

5.3 in the.2019 version). 5.4);

---The requirements for signage have been changed (see Chapter 6, Chapter 6 of the.2019 edition);

---The information provided by the manufacturer has been changed (see Chapter 7, Chapter 7 of the.2019 edition);

---The ignition time requirement in the flame retardant performance test method has been changed (see A.2,

1 Scope

GB 38306-2025 is the Chinese national standard on hand protection - protective gloves against thermal risks, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 29 August 2025 by the Ministry of Emergency Management, and has been in force since 1 September 2026. Classification: ICS 13.340.40, CCS C73. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the technical requirements, markings, and manufacturer-provided information for heat-resistant gloves (hereinafter referred to as "gloves"), and describes the testing... method. This document applies to protection against one or more of the following. flame, contact heat, convective heat, radiant heat, small amounts of molten metal splashes, or large amounts of molten metal spills. Gloves that can cause various forms of heat injury. This document does not apply to gloves used in firefighting and welding operations.

Note. The test results provided in this document are performance ratings, not protection ratings.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 5456-2009 Determination of flame spread performance of textiles in the vertical direction - Burning performance test

GB 8965.3-2022 Protective Clothing - Protective Clothing Against Molten Metal Splashes

GB/T 12624-2020 General Test Methods for Hand Protection

GB/T 17599 Determination of the heat resistance and resistance to molten metal droplet impact of protective clothing fabrics

GB 24541-2022 Hand Protection - Protective Gloves Against Mechanical Hazards

GB 38453-2019 Protective Clothing - Thermal Insulation Suit

GB 42298-2022 General Technical Specification for Hand Protection

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Afterflame time Under specified test conditions, the duration of continuous flaming combustion of the material after the ignition source is removed.

Note. The unit is seconds (s).

3.2 Afterglow time Under specified test conditions, the duration of flameless combustion after the ignition source is removed or after flaming combustion has ceased. Note

1.The unit is seconds (s). Note

2.In this document, smoldering refers to flameless combustion occurring at the edge of the damaged area and spreading throughout the damaged area. Within the damaged area, some areas may experience... The red-hot phenomenon occurs due to the continuous release of heat absorbed in the early stage, and the duration of this red-hot phenomenon is not included in the smoldering time.

3.3 Melting The material softens and becomes flowable at high temperatures.

3.4 dripping The separation of molten droplets during the melting process of the material.

3.5 hole Openings, fractures, or holes formed on the original structure of the sample.

3.6 Contact temperature Tc In contact heat testing, the constant surface temperature of the contact area of the heating cylinder.

3.7 threshold time tt In contact heat testing, the time required for the calorimeter temperature to rise by 10°C.

3.8 Under specified test conditions, using a copper disc with a mass of (18.00±0.05) g and an initial temperature of (25.0±5.0) °C, the heat... The time it takes for the temperature to rise to (24.0±0.2)°C.

Note. The unit is seconds (s).

3.9 Under specified test conditions, when tested with a specified incident heat flux density, the time it takes for the calorimeter temperature to rise to (24.0±0.2)°C.

4 Technical Requirements

4.1 Harmlessness Heat-resistant gloves shall meet the applicable technical requirements in section

5.2 of GB 42298-2022.

4.2 Wear resistance When tested according to the method specified in 5.2, the abrasion resistance of the gloves should reach at least performance level 1 as specified in Table 1. Table

1 Abrasion Resistance Rating Performance level 1, 2, 3,