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

GB 32166.1-2016

**Personal protective equipment - Eye and face protection -
Occupational eye and face protectors - Part 1: Requirements**

个体防护装备 眼面部防护 职业眼面部防护具 第1部分：要求

(English Translation)

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Foreword

Chapter 5 of this part is mandatory; the rest are recommended.

"Personal protective equipment - Eye and face protection - Occupational eye and face protectors" is divided into two parts.

- Part 1. Requirements (GB 32166.1);
- Part 2. Measurement method (GB/T 32166.2).

This part is the first part of GB 32166.

This part was drafted in accordance with the rules given in GB/T 1.1-2009.

This part was proposed by the State Administration of Work Safety.

This part shall be under the jurisdiction of the National Personal Protective

Equipment Technical Committee (SAC/TC 112).

Drafting organizations of this part. China National Institute of Standardization, Shanghai Institute of Work Safety Science, Honeywell Safety Equipment (Shanghai) Co., Ltd., Taizhou Yuyuan Safety Protective Products Co., Ltd., Guangzhou Institute of Metrology and Testing Technology.

1 Scope

This part of GB 32166 specifies the classification, basic requirements and special requirements of occupational eye and face protectors.

This part applies to clear lens protector or components used to protect eye or face safety in occupational eye and face protectors (mainly for industrial protection).

This part does not apply to.

- a) General purpose sunglasses and sunglass lens or eye and face protectors with vision correction;
- b) Eye and face protectors used by patients to protect against exposure during diagnosis or treatment;
- c) Products that directly observe the sun, such as eye protection for observing solar eclipses;
- d) Sports eye and face protectors;
- e) Short-circuit arc eye and face protectors;
- f) Welding eye and face protectors;
- g) Laser eye and face protectors.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this standard.

GB/T 30042-2013 Personal protective equipment - Eye and face protection

- Vocabulary (ISO 4007.2012, MOD)

3 Terms and definitions

The terms and definitions defined in GB/T 30042 apply to this document.

4 Classification of occupational eye and face

protectors

4.1 Functional types of occupational eye and face protectors

The function of occupational eye and face protector refers to the ability to protect against one or more of the following dangers.

4.2 Types of occupational eye and face protectors

According to the structure and style, occupational eye and face protector can be divided into the following types.

5.1 Harmless

Occupational eye and face protectors in contact with the skin shall meet the requirements of the purpose of use and the environment of use. There shall be no factors that endanger the user's health or safety.

5.2 Headband

The headband shall be adjustable or self-adjusting.

Without external force, the width of the contact between the headband that plays the main role in fixing the head and the face of the wearer shall not be less than 5 mm.

5.3 Minimum size requirements for assembled lenses

The minimum size of the assembled lens shall meet the requirements of Table

1.

5.4.2 Visible light transmittance

Test according to the method specified in 5.3 of GB/T 32166.2-2015.For

colorless lenses, the visible light transmittance at the reference point shall not be less than 85%.

5.4.3.1 Wide-angle scattering (haze)

When the visible light transmittance of the occupational eye and face protector is greater than or equal to 15%, the test is performed according to the method specified in 5.4 of GB/T 32166.2-2015.

5.5.1 Minimum strength of unassembled lens

Perform the test according to the method specified in 6.1.1 of GB/T 32166.2-

5.5.2 Minimum strength for occupational eye and face protector

Perform the test according to the method specified in 6.1.2 of GB/T 32166.2-

5.6.1 Thermal resistance

The test shall be performed in accordance with the method specified in 6.2 of GB/T 32166.2-2015. The sample after the test shall not be deformed, peeled or damaged.

5.8.1 Packaging

Products shall be properly packaged and must be accompanied by a product certificate and instruction manual.

5.8.2 Marking

Provide the following information in one or any combination of occupational eye and face protector, labels, product's minimal packaging, instruction manuals.

6.1.1.1 UV attenuation filter

The specific requirements for UV attenuation filters are as follows. UV attenuation filters that cannot meet the requirements of scattered light are identified by the code U; the others are identified by the code UC.