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

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Plastics - Polycarbonate sheets
(English Translation)

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References

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 is required.

This document is modified to adopt ISO 11963:2019 "Plastic polycarbonate sheet specifications, dimensions and performance requirements".

Compared with ISO 11963:2019, this document has many structural adjustments. See the table of structural number changes between the two documents for details.

Appendix A.

The technical differences between this document and ISO 11963:2019 and their reasons are as follows.

The applicable limits of the scope (see Chapter 1) have been changed to suit the actual situation of the domestic polycarbonate sheet industry;

Added the definition of polycarbonate sheet (see Chapter 3) to clarify the product types to which this document applies; -the material types for sheet extrusion (see Chapter 4) have been deleted to adapt to the actual situation of the domestic polycarbonate sheet industry;

The requirements for weather-resistant protective layer and weather resistance of the plate have been increased (see 5.1, 5.6), and the requirements for the appearance of the plate (see 5.2), vertical the requirements for strength (see 5.2) and general performance (see 5.5) are to adapt to the actual situation of the domestic polycarbonate sheet industry;

The normative reference GB/T 2918 replaces ISO 2 9 1 (see 6.1.2) and GB/T 3 9 8 1 2 - 2 0 2 1 replaces ISO 2818 (see 6.1.3), GB/T 1040.2 replaces ISO 527-2 (see 6.4), ISO 179-1:2023 replaces ISO 179-1:2010, ISO 8256:2023 replaces ISO 8256:2004 (see 6.5), ISO 306:2022 replaces ISO 3 0 6. 2 0 1 3 (see 6.6) , GB/T 1 6 3 4.2 - 2 0 1 9 replaced ISO 7 5 - 2. 2 0 0 4 (see 6.7) , GB/T 2410-2008 replaced ISO 13468-1 (see 6.9), GB/T 16422.1

replaced ISO 4892-1, GB/T 16422.2 replaces ISO 4892-2 (see 6.10.1), GB/T 3681.1 replaces ISO 877-1, GB/T 3681.2 replaces ISO 877-2 (see 6.10.2) to adapt to my country's technical conditions and improve operability;

The time for sample conditioning (see 6.1.2), the requirements for sample preparation (see 6.1.3), and the appearance and color of the sample have been changed.

Test requirements (see 6.2), dimensional test requirements (see 6.3), tensile test requirements (see 6.4), light transmittance test requirements the test requirements for fire resistance (see 6.9) and artificial weathering (6.10.1) are added.

6.11), to adapt to the actual situation of the domestic polycarbonate sheet industry;

The requirements of the inspection rules (see Chapter 7) have been changed to comply with the standard writing habits of my country;

Added the content of "marking, packaging, transportation and storage" (see Chapter 8) to comply with the standard writing habits of my country;

Change other performance requirements to informative Appendix B, as its content does not contain specified test items and performance requirements, and is only for reference.

Both parties need to provide certain references;

The tensile test specimen requirements in 6.4.1 of ISO 11963:2019 have been deleted to improve operability;

Chapter 8 of ISO 11963:2019 has been deleted to comply with relevant laws and regulations of my country. -the following editorial changes were made to this document.

To coordinate with the existing standards, the name of the standard is changed to "Plastic Products Polycarbonate Sheets"; -Added note in 4.2;-Added note in 6.5.-

1 Scope

This document specifies the material specifications of extruded, solid or hollow, flat-type polycarbonate (PC) sheets (hereinafter referred to as "sheets").

Materials, requirements, inspection rules, marking, packaging, storage and transportation, and the corresponding test methods are described.

This document applies to colored or colorless, transparent, translucent or opaque, with a weather-resistant protective layer on one or both sides, with a large thickness the production, use and sale of boards with a thickness of 1.5 mm or greater, and boards without weather-resistant protective layer can also be used for reference.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies.

in this document.

GB/T 1040.2 Determination of tensile properties of plastics Part 2: Test conditions for molded and extruded plastics (GB/T 1040.2-2022, ISO 527-2:2012, MOD) GB/T 1634.2-2019 Determination of deflection temperature of plastics under load Part 2: Plastics and hard rubber (ISO 75-2:2013, MOD) GB/T 2410-2008 Determination of light transmittance and haze of transparent plastics GB/T 2828.1 Sampling procedures for inspection by attributes Part 1: Sampling plans for batch inspection based on acceptance quality limit (AQL) GB/T 2918 Standard environment for conditioning and testing of plastic specimens (GB/T 2918-2018, ISO 291:2008, MOD) GB/T 3681.1 Plastics Solar Radiation Exposure Test Method Part 1: General Principles (GB/T 3681.1-2021, ISO 877-1:2009, IDT) GB/T 3681.2 Test methods for plastics exposed to solar radiation Part 2: Direct natural weathering and exposure to weather behind window glass Aging (GB/T 3681.2-2021, ISO 877-2:2009, IDT) GB/T 6672 Plastic film and sheet thickness determination mechanical measurement method GB/T 6673 Determination of length and width of plastic film and sheeting GB 8624 Classification of combustion performance of building materials and products GB/T 8626 Test methods for flammability of building materials GB/T 11942 Color measurement method for colored building materials GB/T 12967.4 Test methods for anodic oxide films and organic polymer films of aluminium and aluminium alloys Part 4: Determination of light and heat resistance GB/T 16422.1 Plastics laboratory light source exposure test method Part 1: General (GB/T 16422.1-2019, ISO 4892-1:2016, IDT) GB/T 16422.2 Plastics laboratory light source exposure test method Part 2: Xenon arc lamp (GB/T 16422.2-2022, ISO 4892-2:2013, IDT) GB/T 20284 Single combustion test for building materials or products GB/T 39812-2021 Machining preparation of plastic specimens (ISO 2818:2018, IDT) GB/T 39822-2021 Determination of the yellowness index of plastics and its change value ISO 75-1 Plastics-Determination of deflection temperature under load Part 1: General test method temperature of deflection under load-Part 1: General test method) Note. GB/T 1634.1-2019 Determination of deflection temperature of plastics under load Part 1: General test method (ISO 75-1:2013, MOD) ISO 179-1:2023 Plastics - Determination of the impact properties of a charpy beam - Part 1: Non-instrumented impact test (P lastics -