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GA

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

GA/T 460.1-2020

Replacing GA 460.1-2004

**Technical specifications for body materials and printing films
for Resident Identity Cards - Part 1: White PETG film for
flattering**

(English Translation)

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Foreword

GA/T 460 "Technical Specifications for Resident ID Card Body Materials and Printing Films" is divided into five parts.

---Part 1: Flat-layer white PETG film for card making;

---Part 2: Printed white PETG film for card making;

---Part 3: Protective PETG film for card making;

---Part 4: White PETG film for card-making modules and coil carrier layer;

---Part 5: Printing film.

This part is part 1 of GA/T 460.

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

This part replaces GA 460.1-2004 "Technical Specification for Resident ID Card Body Material and Printing Film Part 1: Flattening for Card Making the main technical changes compared with GA 460.1-2004 are as follows.

---Revised as a recommended standard;

---Modified the normative reference documents GB/T 1033.1, GB/T 2406.2, GB/T 2410, GB/T 2828.1, GB/T 10610, the version number of GB/T 14216 and ASTM D882 (see Chapter 2, Chapter 2 of the 2004 edition);

---Added the description of the test method judgment result (see Chapter 5, Chapter 5 of the 2004 edition).

This part was proposed by the Public Security Administration of the Ministry of Public Security.

This part is under the jurisdiction of the Computer and Information Processing Standardization Technical Committee of the Ministry of Public Security.

Drafting unit of this section. The First Research Institute of the Ministry of Public Security.

1 Scope

This part of GA/T 460 specifies the technical requirements, inspection methods and quality of the white PETG film for the gasket layer of the resident ID card.

Evaluation procedures and storage conditions.

This part is applicable to the production of resident ID card body padding layer using PETG as raw material.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 1033.1-2008 Determination of the density of plastic non-foam plastics Part 1: Immersion method, liquid pycnometer method and titration method GB/T 1633-2000 Thermoplastic Vicat Softening Temperature (VST) Test Method GB/T 2406.2-2009 Determination of combustion behavior of plastics by oxygen index method Part 2: Room temperature test GB/T 2410-2008 Determination of light transmittance and haze of transparent plastics GB/T 2828.1-2012 Sampling inspection procedure by attributes Part 1: Batch inspection sampling plan retrieved by acceptance quality limit (AQL) GB/T 2918-2018 Standard environment for condition adjustment and testing of plastic samples GB/T 6672-2001 Plastic film and sheet thickness determination mechanical measurement method GB/T 10610-2009 Product Geometric Technical Specification (GPS) Surface Structure Profile Method. Rules and Methods for Evaluating Surface Structure GB/T 13525-1992 Test method for tensile impact properties of plastics GB/T 14216-2008 Determination of the wetting tension of plastic films and sheets GB/T 15267-1994 PVC rigid sheet and film for food packaging ASTM D882-2012 Test Method for Tensile Properties of Plastic Film

3 Terms and definitions

The following terms and definitions apply to this document.

Modified polyethylene terephthalate PETG an amorphous polymer obtained by modification with polyethylene terephthalate (PET) as the base material.

Material bonding strength the bonding strength between the same PETG materials.

T type peel strength the average tensile force required to gradually pull apart the adhesive layer of the sample (width 10mm) at an angle of 90° under specified conditions using T-type test samples.