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

GB/T 39821-2021

**Plastics - Determination of apparent density of moulding
material that cannot be poured from a specified funnel**

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Foreword

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

This standard uses the redrafting method to amend and adopt ISO 61.1976 "The Apparent Density of Molding Materials That Plastics Cannot Flow Out of the Specified Funnel

Determination of".

The technical differences between this standard and ISO 61.1976 and the reasons are as follows.

---In order to specific scope of application, a description of the scope of application has been added (see Chapter 1);

---In order to use the instrument intuitively, a schematic diagram of the apparent density test instrument has been added (see Figure 1);

---For the scientific nature of the test, the requirement that the tested sample should not be reused during the three measurements of the sample has been added (see 3.2);

--- For the scientific nature of the data, the requirement of retaining two significant digits in the sample results has been increased (see Chapter 4).

This standard was proposed by the China Petroleum and Chemical Industry Federation.

This standard is under the jurisdiction of the National Plastics Standardization Technical Committee (SAC/TC15).

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1 Scope

This standard specifies the apparent density of loose molding materials that cannot flow from the specified funnel, that is, the method for determining the mass per unit volume.

This standard applies to loose molding materials, such as powder or pellets.

Note. For the method of determining the apparent density of loose molding materials that can flow from the specified funnel, see GB/T 1636.

If the density of the molding compound is similar under the molding conditions, the apparent density has a certain degree for evaluating the relative looseness or relative volume of the molding compound.

the value of.

2.2 Straightedge, accurate to 1mm.

2.3 The measuring cylinder, made of metal, has a smooth inside, a volume of (1000 $\pm$ 20) mL, and an inner diameter of (90 $\pm$ 2) mm, as shown in Figure 1.

2.4 The piston consists of a hollow cylinder with a mass of (2300 $\pm$ 20) g, which is closed at one end, and its outer diameter is slightly larger than the inner diameter of the measuring cylinder.

Small, the piston can reach the required quality by adding a lead block, as shown in Figure 1.

Description.

1---scale;

2---Piston;

3---Lead block or material that can make the piston reach the required quality;

4---The measuring cylinder.

Figure 1 Schematic diagram of apparent density test instrument