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

GB/T 17473.1-2008

**Test methods of precious metals pastes used for
microelectronics -- Determination of solids content**

(English Translation)

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Foreword

This standard is an integrated revision of GB/T 17473-1998 " Test methods of precious metal pastes used for thick film microelectronics" (all parts). It is divided into 7 parts:

- GB/T 17473.1-2008 Test methods of precious metals pastes used for microelectronics - Determination of solids content;
- GB/T 17473.2-2008 Test methods of precious metals pastes used for microelectronics - Determination of fineness;
- GB/T 17473.3-2008 Test methods of precious metals pastes used for microelectronics - Determination of sheet resistance;
- GB/T 17473.4-2008 Test methods of precious metals pastes used for microelectronics - Determination of adhesion;
- GB/T 17473.5-2008 Test methods of pastes used for microelectronics - Determination of viscosity;
- GB/T 17473.6-2008 Test methods of precious metal pastes used for microelectronics - Determination of resolution;
- GB/T 17473.7-2008 Test methods of precious metals pastes used for

microelectronics - Determination of solderability and solderleaching resistance.

This Part is Part 1 of GB/T 17473-2008.

This part replaces GB/T 17473.1-1998 "Test methods of precious metal pastes used for thick film microelectronics - Determination of solids content".

Compared with GB/T 17473.1-1998, this Part mainly has the following changes:

- CHANGE the original standard name into "Test methods of precious metals pastes used for microelectronics - Determination of solids content";
- DELETE the reference document GB/T 2421-1989;
- ADD the determination of solid content of polymer low-temperature curing paste;
- For polymer low-temperature solidification paste, DETERMINE the temperature for detected solid content, according to the different use temperature of the paste;

Test methods of precious metals pastes used for
microelectronics - Determination of solids content

1 Scope

This Part specifies the test method for the solid content in the precious metal paste, for microelectronics technology.

This Part applies to the determination of the solid content of precious metal pastes, for various sintered and solidified microelectronics technologies.

2 Normative references

The provisions in following documents become the provisions of this Part through reference in this Part. For the dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Part; however, parties who reach an agreement based on this Part are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB/T 8170 Rules of rounding off for numerical values & expression and judgement of limiting values

3 Method principle

The precious metal paste is heated at a certain temperature, for a certain period of time. The solid content is determined, according to the mass difference, before and after heating.

4.2 Box-type resistance furnace: The highest operating temperature is 1000 °C;
the temperature control accuracy is ± 20 °C.

4.3 Blast-type constant temperature oven: The highest operating temperature
is 300 °C, and the temperature control accuracy is ± 5 °C.

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