



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

GB/T 16742-2008

Replacing GB/T 16742.1-1997

**Function representation of particle size distribution -
Power-function**

颗粒粒度分布的函数表征 幂函数

Issued on: July 18, 2008

Implemented on: February 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This standard replaces GB/T 16742.1-1997 "function of particle size distribution characterization of power function." This standard compared with GB/T 16742.1-1997, the main technical content changes as follows:

2 Normative references";

3 Terms and definitions" has been modified and added two;

--- According to Chinese customs on the part of the text made editorial changes. The Standard Appendix A, Appendix B and Appendix C are informative appendices. This standard by the national and sorting method Standardization Technical Committee particles sieved (SAC/TC168) and focal points. This standard was drafted. Beijing Physical and Chemical Analysis Center. The main drafters of this standard. Zou Tao, Zhou Suhong, plateaus, king Feng, Chen Ying. This standard replaces the standards previously issued as follows:

--- GB/T 16742.1-1997. A function of particle size distribution characterization of power function

1 Scope

GB/T 16742-2008 is the Chinese national standard on function representation of particle size distribution - power-function. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 18 July 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 February 2009. Classification: ICS (ICS) , CCS A28. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the method for characterization of power function of particle size distribution. This standard applies to represents the cumulative distribution of the particles of the system size.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 16418 particle systems -

3 Terms and Definitions

GB/T 16418 and established in the following terms and definitions apply to this standard.

3.1 Ratio of particle surface area to its volume.

3.2 The ratio of particle surface area to its mass.

3.3 An equivalent spherical surface area The specific surface area of particles of the same volume.

4 Symbol

Symbols are shown in Table 1 of this standard referenced provisions. Table

1	Symbol	Description	Unit
C		double-logarithmic linear power function intercept	M1
Q	(x)	double-logarithmic power function slope of the line	
R	(x)	the cumulative distribution under sieve	
S _m		the cumulative distribution sieve	
S _v		particle mass ratio of surface area	cm ² /g
X ₀		specific surface area of the particle volume	cm ⁻¹
		particle size	cm