

ICS 71.120
CCS G94



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

GB/T 18749-2019

Replacing GB/T 18749-2008

Specification for chemical-resistant ceramic tower packings

耐化学腐蚀陶瓷塔填料技术条件

Issued on: December 10, 2019

Implemented on: November 1, 2020

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Shape, size and number of stacking	1
5 Size requirements	3
6 Physical and chemical performance requirements	3
7 Chemical composition	4
8 Test method	4
17 Appendix I (Normative) Shape, size and characteristics of corrugated packing	18

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 18749-2008 "Technical Conditions for Chemical-Resistant Ceramic Tower Packing". Compared with GB/T 18749-2008, In addition to editorial changes, the main technical changes are as follows:

- Revised the requirements of wall thickness and number of packings of circular ceramic tower packing (see Table 1, Table 1 of the.2008 edition);
- Amended the requirements for the number of saddle-shaped ceramic tower packings (see Table 2, Table 2 of the.2008 edition);
- Amended the requirements for the number of packings of arc saddle and rectangular saddle-shaped ceramic tower packing (see Table 3, Table 3 of the.2008 edition);
- Modified the requirements for the shape, size and characteristics of other types of fillers (see 4.2, 4.2 of the.2008 edition);
- Increased the requirements for compressive strength of ring fillers (see 6.1.3);
- Increased the compressive strength requirements of corrugated fillers (see 6.1.4);
- Revised the number of samples for compressive strength (see 8.1, 8.1 of the.2008 edition);
- Increased the requirements for the number of samples of continuous packing and corrugated packing (see 8.1);

- Increased the number of samples required for acceptance of ring packing and corrugated packing (see 9.3);
- Modified requirements for wall thickness deviation of DN38mm specifications for filler products such as Bauer ring, rectangular saddle, hetero saddle, stepped ring, conjugate ring (See Appendix A to Appendix E, .2008 edition of Appendix A to Appendix E);
- Modified wall thickness data of DN76mm specifications for filler products such as Ball rings, rectangular saddles, odd saddles and stepped rings (see Appendix A to (Appendix D, Appendices A to D of the .2008 edition);

1 Scope

GB/T 18749-2019 is the Chinese national standard on specification for chemical-resistant ceramic tower packings, in the field of chemical technology. 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 10 December 2019 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 November 2020. Classification: ICS 71.120, CCS G94. 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 shape, size, and number of packing, size requirements, physical and chemical performance requirements, Chemical composition, test methods, acceptance. This standard applies to ceramic products fired from natural clay and mixtures and used in chemical or other related industries as tower fillers.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

HG/T 3210 Test method for properties of acid-resistant ceramic materials

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Ceramic tower packing ceramic tower packing Ceramic products with various specific configurations, such as spherical, cylindrical rings with vertical or inclined end faces, rings with obstacles inside, and open-hole cylindrical shapes And arc saddles. These ceramics

are used in the tower to provide contacting surface area to promote liquid-to-liquid, gas-to-liquid and Gas-to-gas energy transfer, mass transfer, or chemical reaction.

3.2 Fine porcelain filler packing Ceramic components made of refined clay and other natural mineral raw materials that are specially formulated to form billets. This ceramic product has a uniform The crystal and vitreous structure are white or light gray in appearance and have a small water absorption.

3.3 Stoneware tower packing Ceramic products made of natural clay and other mineral raw materials are specially formulated to form a billet, which has a large water absorption rate.

4 Shape, size and stacking number

4.1 The shape, size, and number of packings of circular, saddle, arc saddle, and unreinforced rectangular saddle ceramic tower fillers shall comply with Tables 1 to

3 Requirements, or determined by the supply and demand sides through consultation.