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

GB/T 44180-2024

**General technical requirements for kitchen and sanitary ware
fittings**

厨卫五金产品通用技术要求

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Foreword

GB/T 44180-2024 was issued on 29 June 2024 by the State Administration for Market Regulation of the People's Republic of China and the National Standardization

Administration of the People's Republic of China, and has been in force since 1 January 2025. The /T in the designation marks it as a recommended national standard.

This is the official English translation published by openstd. SAC/TC 174 is in charge of the English translation; in case of any doubt about its contents, the Chinese original is authoritative.

The document is drafted in accordance with GB/T 1.1-2020 Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents. Attention is drawn to the possibility that some of its elements may be the subject of patent rights; the issuing body is not to be held responsible for identifying any or all such rights.

The document was proposed by the China National Light Industry Council and prepared by SAC/TC 174, the National Technical Committee on Hardware Product of the Standardization Administration of China.

Introduction

This document refines the commonality of kitchen and sanitary ware fittings, gives the general performance of the fittings and the general requirements of each functional module according to the use of various types of the fittings, so as to ensure the basic quality of the fittings. In order to facilitate usage, this document provides a detailed list of applicable test items for the fittings (see Annex A).

1 Scope

The umbrella technical standard for Chinese kitchen and bathroom hardware: taps, shower systems and sprayers, flexible hoses, angle valves, drainage fittings and floor drains, sinks, kitchen pendants, grab bars and bathroom accessories. Until it appeared, each of those products was covered by its own product standard and there was no single place that stated what any kitchen or sanitary fitting has to satisfy, which made requirements uneven from one family to the next and left new product types with no rules at all. This document collects the requirements that are common to all of them - surface corrosion resistance and coating adhesion, materials, hygiene of the parts that touch drinking water, mechanical and life requirements, package marking and instructions - and then adds the requirements specific to plumbing supply fittings and to plumbing waste fittings. Two concerns run through it and explain much of its content: drinking water safety, with limits on the lead content of solders and alloys in contact with water and an annex on the leaching of organic compounds, and accessibility, with a dedicated clause and a normative annex on the loading performance of grab bars for people with impaired mobility. An informative annex tabulates which test items apply to which type of fitting, which is what makes the standard usable in practice. It applies to the research and development, design, manufacture and inspection of kitchen and sanitary ware fittings, and is used by manufacturers, testing

laboratories and buyers writing specifications.

This document specifies the classification, materials, technical requirements, package marking and instructions for kitchen and sanitary ware fittings, as well as describes the corresponding test methods.

This document is applicable to the research and development, design, manufacture and inspection of kitchen and sanitary ware fittings.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 191 Graphical symbols marking for handling and storage of packages; GB/T 4208 Degrees of protection provided by enclosure (IP code); GB 4343.1 Electromagnetic compatibility requirements for household appliances, electric tools and similar apparatus - Part 1: Emission; GB 4706 (all parts) Safety of household and similar electrical appliances.

GB/T 6461-2002 Methods for corrosion testing of metallic and other inorganic coatings on metallic substrates - Rating of test specimens and manufactured articles subjected to corrosion tests; GB/T 9286 Paints and varnishes - Cross-cut test; GB/T 10125 Corrosion tests in artificial atmospheres - Salt spray tests; GB/T 16422.2-2022 Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps.

GB 17625.1 Electromagnetic compatibility - Limits - Part 1: Limits for harmonic current emissions (equipment input current not more than 16 A per phase); GB/T 31586.2 Corrosion protection of steel structures by protective paint systems - Assessment of, and acceptance criteria for, the adhesion/cohesion (fracture strength) of a coating - Part 2: Cross-cut testing and X-cut testing.

GB/T 33733 Terminology and classification for the kitchen and sanitary ware fittings; GB/T 36947-2018 User interface design specification for household electrical appliances for older persons; QB/T 5419-2019 General specification for coatings of kitchen and sanitary hardware; QB/T 5525 Limits and test methods for hazardous substances extraction in kitchen and sanitary hardware products.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in GB/T 33733 and the following apply.

3.1 grab bar: facility that facilitates safe movement and support for persons with impaired mobility in accessible water closet, washroom and shower room. [SOURCE: GB 50763-2012, 2.0.14]

3.2 micro-hydro generator: device that utilizes internal water flow of the fittings to generate electricity, for power supplying during fittings operation and for charging during low battery.
[SOURCE: GB/T 24293-2009, 3.9, modified]

4 Classification

4.1 According to application, fittings can be classified into: a) plumbing supply fittings: faucet, shower system, shower, sprayer, flexible hose, angle valve; b) plumbing waste fittings: drainage fittings, floor drain; c) others: sink, kitchen pendant, grab bar, bathroom accessories.

4.2 According to hygiene conditions, fittings can be classified into: a) fittings in contact with drinking water: washbasin faucet, kitchen faucet, angle valve for sanitary contact with drinking water, flexible hose for drinking water, etc.; b) others.

5 Materials

5.1 The materials used in the fittings shall comply with the relevant national standards. Material standards commonly used are shown in Annex B.

5.2 The parts in contact with water shall not use materials that are easily corroded, and shall not cause any change of the water in terms of quality, appearance, taste, smell, etc.

5.3 Solders and fluxes in direct contact with drinking water shall not exceed by mass 0.2% lead content. Metal alloys in direct contact with drinking water shall not exceed 2.5% lead content.