



National Standard of the People's Republic of China

GB/T 42065-2022

Green product assessment — Kitchen and sanitary ware fittings

绿色产品评价 厨卫五金产品

(English Translation)

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Foreword

In case of any doubt regarding the contents of the English translation, the Chinese original shall prevail.

This document is drafted in accordance with the provisions of the 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 the elements of this document may be the subject of the patent rights. The issuing body of this document shall not be held responsible for identifying any or all such patent rights.

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This document was drafted by: Jomoo Kitchen & Bath Co., Ltd, China National Hardware Association, China National Institute of Standardization, Xiamen Zhuo Biao Kitchen and Bathroom Technology Service Co., Ltd., Xiamen Lota International Co., Ltd., NINGBO AMICO COPPER VALVE MANUFACTURE CO.LIMITED, Xuancheng City Duschy Electronic & Electrical Appliances Co., Ltd, Guangdong Jinkaida Industry Co., Ltd., Zhejiang Double-lin Valves Co., Ltd., Guangzhou Monalisa Bath Ware Co., Ltd., Fujian Xiaomu Technology Co., Ltd., Fujian Inspection and Research Institute for Product Quality, WENZHOU HONGSHENG GROUP CO., LTD., Foshan Supervision Testing Centre of Quality and Metrology, Shanghai Jianke Technical Assessment of Construction Co., Ltd., Zhejiang Light Industrial Products Inspection and Research Institute, Xiamen Xinxin Shun New Materials Technology Co., Ltd., Jiangmen Haorui Engineering Design Co., Ltd., Vnuo Certification & Testing Co., Ltd.

Chief drafters: Lin Xiaowei, Liu Runfeng, Lin Ling, Zhu Yi, Chen Liangquan, Liao Ronghua, Zheng Xuezhen, Shao Jiajia, Ding Shuang, Yuan Han, Xu Jianping, Yan Yunfang, Lin Hailin, Ding Weigang, Huang Qiuqiong, Li Yong, Zhang Zhaohui, Guan Hongsheng, Yang Zhixiong, Yan Weiguo, Luo Qi, Zheng Shengshun, Liang Defu, Zhai Guanghong, He Xin, Guo Yingyun.

This English translation was translated by: Jomoo Kitchen & Bath Co., Ltd., Xiamen Institute of Standardization.

Chief translators: Zeng Jiaqi, Chen Liangquan, Chen Yu.

Green product assessment — Kitchen and sanitary ware fittings

1 Scope

This document specifies the terms and definitions, assessment requirements and assessment methods for green product assessment of kitchen and sanitary ware fittings.

This document is applicable to green product assessment of kitchen and sanitary ware fittings, including faucets, stopvalves, shower systems, stainless sinks, floor drains, flexible hoses and etc.

2 Normative references

The contents in the following documents constitute essential provisions of this document through normative references in the text. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- GB 4806.9 *National food safety standard: Metal materials and products for products in Contact with food*
- GB 4806.10 *National food safety standard: Coatings and paints for products in Contact with food*
- GB/T 10125 *Corrosion tests in artificial atmospheres - Salt spray tests*
- GB/T 19001 *Quality management systems—Requirements*
- GB 18145 *Ceramic cartridge faucets*
- GB/T 23447 *Sanitary ware - Shower for bathing*
- GB/T 23448 *Sanitary ware - Flexible hose*
- GB/T 23986 *Paints and varnishes - Determination of volatile organic compound (VOC) content - Gas-chromatographic method*
- GB/T 24001 *Environmental management systems - Requirements with guidance for use*
- GB 25501 *Minimum allowable values of water efficiency and water efficiency grades for faucets*
- GB/T 27710 *Floor drain*
- GB 28378 *Minimum allowable values of water efficiency and water efficiency grades for showers*
- GB/T 33000 *Guideline of China occupational safety and health management system*
- GB/T 33733 *Terminology and classification for the kitchen and sanitary ware fittings*
- GB/T 45001 *Occupational health and safety management systems - Requirements with guidance for use*
- JC/T 932 *Drainage fittings for sanitary wares*
- QB/T 1334 *General technical specifications for faucets*
- QB/T 2806 *Thermostatic faucets*
- QB/T 5003 *Electronic faucet*
- QB/T 5281 *Digital display shower*
- QB/T 5418 *Thermostatic shower system*
- QB/T 5420 *Drinking water system components - lead content limit and test method*

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 listed in the following apply.

3.1

green product

product that, throughout its life cycle, meets environmental protection requirements, is harmless or poses minor hazards to the ecological environment and human health, consumes fewer resources and less energy, and is of high quality

[Source: GB/T 33761-2017, 3.1]

4 Assessment requirements

4.1 Basic requirements

4.1.1 The pollutant emission status of the manufacturer shall comply with relevant environmental protection laws and regulations, meet the requirements of national and local pollutant discharge standards. No major quality, safety or environmental accidents have occurred in the past three years.

4.1.2 The total pollutant control of the manufacturer shall meet the national and local total pollutant discharge control targets.

4.1.3 The management of the manufacturer shall establish and maintain an environmental management system, a quality management system, an occupational health and safety management system, and a work safety standardization management system in accordance with GB/T 24001, GB/T 19001, GB/T 45001, and GB/T 33000 respectively.

4.1.4 The product quality level shall meet the requirements of the applicable national mandatory standards and the declared implemented standards.

4.1.5 The extraction of hazardous substances from kitchen and sanitary ware fittings in contact with drinking water shall comply with the requirements of QB/T 5525; the lead content limit shall comply with the requirements of QB/T 5420.

4.2 Assessment criteria

4.2.1 Faucets and stopvalves

The assessment criteria for faucets and stopvalves are shown in Table 1.

Table 1 Assessment criteria for faucets and stopvalves

Primary criteria	Secondary criteria		Unit	Baseline	Basis for determination
Environmental attribute	Extraction of hazardous substances ^a	The lead test statistic (Q)	$\mu\text{g/L}$	≤ 0.25	Test in accordance with GB 18145 for ceramic cartridge faucets; test in accordance with QB/T 5525 for others, and provide the test reports
		Cd		≤ 0.01	
		Hg		≤ 0.01	
		Ni		≤ 10.0	
		Cr		≤ 5.0	
		Cr ⁶⁺		≤ 0.5	
		Zn		≤ 100.0	
Resource attributes	Water saving performance	Water efficiency grades	Level	1	Test in accordance with GB 25501 and provide the test report
		Uniformity of flow ^b	L/min	≤ 2.0	
		Closure time ^c	s	≤ 1.0	Test in accordance with QB/T 1334 and provide the test report
Energy attributes	Energy consumption	DC	mW	Standby: ≤ 0.10	Test in accordance with QB/T 1334 and provide the test report
		AC	W	Standby: ≤ 0.2 ; Operating: ≤ 1.0	
Quality attribute	Endurance	faucet	Cycle	$\geq 400\ 000$	Test in accordance with GB 18145 for ceramic cartridge faucets; test in accordance with QB/T 1334 for others, and provide the test report
				$\geq 140\ 000$	
				$\geq 400\ 000$	Test in accordance with QB/T 1334 and provide the test report
				$\geq 400\ 000$	
				$\geq 300\ 000$	Test in accordance with QB/T 5003 and provide the test report
				$\geq 60\ 000$	Test in accordance with QB/T 2806 and provide the test report
				$\geq 60\ 000$	Test in accordance with GB 18145 for ceramic cartridge faucets; test in accordance with QB/T 1334 for others, and provide the test report
				$\geq 160\ 000$	
				$\geq 20\ 000$	

Primary criteria	Secondary criteria	Unit	Baseline	Basis for determination
	Corrosion resistance ^d	—	≥ Acetic acid salt spray for 48 h, Grade 10	Test in accordance with GB/T 10125 and provide the test report
^a Only applicable to faucets or stopvalves intended for contact with drinking water, such as kitchen faucets, lavatory faucets and water dispenser faucets. ^b Only applicable to lavatory faucets, kitchen faucets and bidet faucets. ^c Only applicable to sensor faucets. ^d Only applicable to visible outer surfaces after installation.				

4.2.2 Shower systems

The assessment criteria for shower systems are shown in Table 2.

Table 2 Assessment criteria for shower systems

Primary criteria	Secondary criteria		Unit	Baseline	Basis for determination
Resource attributes	Water efficiency grade		Level	1	Test in accordance with GB 28378 and provide the test report
Quality attribute	Maximum outlet water temperature ^a		℃	≤ 45	Test in accordance with QB/T 5418 and provide the test report
	Endurance	single-handle double-control switch	Cycle	≥ 140 000	Test in accordance with GB 18145 for ceramic cartridge faucets; test in accordance with QB/T 1334 for others, and provide the test report
		single-handle single-control switch		≥ 400 000	
		Diverter switch		≥ 60 000	
		Swing spout		≥ 60 000	
		Thermostatic control		≥ 60 000	Test in accordance with QB/T 5418 and provide the test report
		Shower head holder		≥ 6 000	
		Slide bar		≥ 4 000	
		Flexible hose		Tensile: ≥ 20 000	Test in accordance with GB/T 23448 and provide the test report
		Shower		Functional switching & Swing test for ball joint: ≥ 20 000	Test in accordance with GB/T 23447 and provide the test report

Primary criteria	Secondary criteria		Unit	Baseline	Basis for determination
				Displayed function: ≥ 4 000	Test in accordance with QB/T 5281 and provide the test report
	Corrosion resistance ^b		—	≥ Acetic acid salt spray for 48 h, Grade 10	Test in accordance with GB/T 10125 and provide the test report
^a Only applicable to thermostatic shower system.					
^b Only applicable to visible outer surfaces after installation.					

4.2.3 Stainless steel sinks

The assessment criteria for stainless-steel sinks are shown in Table 3.

Table 3 Assessment criteria for stainless-steel sinks

Primary criteria	Secondary criteria		Unit	Baseline	Basis for determination
Environmental attribute	Anti-condensation of coating	Volatile organic compounds	g/L	≤ 5	Test in accordance with GB/T 23986 and provide the test report
	Migration level of hazardous substances from metallic materials in contact with food	As	mg/kg	No detection	Test in accordance with GB 4806.9 and provide the test report
		Cd			
		Pb			
	Migration level of hazardous substances from coating materials in contact with food	Overall migration	mg/dm ²	≤ 2.0	Test in accordance with GB 4806.10 and provide the test report
		Permanganate Index	mg/kg	≤ 2.0	
		Heavy metals (as Pb)		≤ 0.01	
Quality attribute	Corrosion resistance ^a		—	Metallic materials in contact with food: ≥ Neutral salt spray for 96 h, Grade 10; Coating surface of drainage fitting: ≥ Acetic acid salt	Test in accordance with GB/T 10125 and provide the test report

Primary criteria	Secondary criteria	Unit	Baseline	Basis for determination
			spray for 48 h, Grade 10	
	Thermal cycle	Cycle	Drainage fitting: ≥ 15	Test in accordance with JC/T 932 and provide the test report
	Endurance		Drainage fitting: ≥ 20 000	
^a Only applicable to thermostatic shower system.				

4.2.4 Floor drains

The assessment criteria for floor drains are shown in Table 4.

Table 4 Assessment criteria for floor drains

Primary criteria	Secondary criteria		Unit	Baseline	Basis for determination
Quality attribute	Corrosion resistance ^a	Coatings and platings	—	≥ Acetic acid salt spray for 48 h, Grade 10	Test in accordance with GB/T 10125 and provide the test report
		Uncoated and unplated metal parts/Anodic oxide film		≥ Neutral salt spray for 200 h, Grade 10	
	Endurance		Cycle	≥ 60 000	Test in accordance with GB/T 27710 and provide the test report
	Leaktightness ^b		—	60 min, no leakage	
	Trap seal stability ^c		mm	≥ 40	
^a Only applicable to visible outer surfaces after installation.					
^b Only applicable to mechanical sealed floor drain and blend seal floor drain.					
^a Only applicable to water sealed floor drain.					

4.2.5 Flexible hoses

The assessment criteria for flexible hoses are shown in Table 5.

Table 5 Assessment criteria for flexible hoses

Primary criteria	Secondary criteria		Unit	Baseline	Basis for determination
Environmental attribute		The lead test statistic (Q)	$\mu\text{g/L}$	≤ 0.05	
		vinyl chloride		≤ 0.01	

Primary criteria	Secondary criteria		Unit	Baseline	Basis for determination
	Extraction of hazardous substances ^a	bis(2-ethylhexyl)phthalate (DEHP)		≤ 0.01	Test in accordance with QB/T 5525 and provide the test report
		dimethyl phthalate		≤ 0.01	
		diethyl phthalate		≤ 0.01	
		di-n-butyl phthalate		≤ 0.01	
		butylbezyl phthalate		≤ 0.01	
		benzothiazole		≤ 0.01	
	Corrosion resistance ^b		—	≥ Acetic acid salt spray for 48 h, Grade 10	Test in accordance with GB/T 10125 and provide the test report
	Tensile resistance		Cycle	flexible hose for shower, flexible hose for washing and pullout hose for faucet: ≥ 20 000	Test in accordance with GB/T 23448 and provide the test report
	Intermittent impulse pressure			flexible link hose for water: ≥ 500 000 flexible hose for washing: ≥ 100 000	
	Thermal cycling procedure			flexible hose for shower, flexible hose for washing and pullout hose for faucet: ≥ 600	
	Aging resistance		h	flexible link hose for water and flexible hose for washing: ≥ 336	
^a Only applicable to flexible hoses contact with drinking water.					
^b Only applicable to visible outer surfaces after installation.					

5 Assessment methods

This document adopts the method of criteria compliance assessment. Green kitchen and sanitary ware fittings shall meet both the basic requirements (4.1) and the assessment criteria (4.2).

国家标准《绿色产品评价 厨卫五金产品》（外文版）编制说明

（征求意见稿）

（一）工作简况

1、立项目的

厨卫五金品种繁多，与人民生活息息相关，在国民经济中具有十分重要的地位。随着厨卫五金行业的快速发展，中国成为全球最大的厨卫五金制造国，约有生产企业 3000 多家，市场规模达 2000 多亿元/年。

GB/T 42065-2022《绿色产品评价 厨卫五金产品》主要从节材、节能、节水、安全、环境保护等方面对产品全生命周期建立统一的绿色产品评价要求，用于解决产品在生产和使用过程中资源消耗高、有害物质析出、挥发性有机物排放等问题。

该标准作为厨卫五金行业首项绿色产品评价国家标准，是市场监管总局开展绿色产品认证工作的核心依据之一，并与《绿色产品评价通则》等标准共同构成绿色产品认证技术要求，是厨卫五金生产企业申请绿色认证必须遵守的基本准则。

《绿色产品评价 厨卫五金产品》的实施更好地指导企业开发低碳环保型产品，有力推动了厨卫五金行业向资源节约型、环境友好型的转型，提升行业绿色竞争力，引导消费者选择绿色产品。

将该标准转化为外文版本有利于推动绿色制造领域标准化国际合作，服务“一带一路”国家战略，促进中国厨卫五金产品及标准“走出去”，增强中国在全球绿色供应链中的话语权。

2、任务来源

根据国标委发〔2025〕55号文件《国家标准委关于下达《绿色产品评价 文具》等57项国家标准外文版计划的通知》的要求，由九牧厨卫股份有限公司、厦门市标准化研究院承担国家标准 GB/T 42065-2022《绿色产品评价 厨卫五金产品》外文版的翻译工作，本标准项目计划编号为 W20256316。本标准由中国轻工业联合会提出，全国五金

制品标准化技术委员会（SAC/TC 174）归口并执行，计划周期为一年（项目下达日期2025-10-17）。

3、主要工作过程

(1) 起草阶段：

本次翻译为中英文同步项目，标准出版社稿确认后，九牧厨卫股份有限公司于2026年5月29日征集起草组，2026年6月组织成立标准翻译工作组，制定了标准翻译计划，明确了任务分工。通过查阅文献及多次工作组讨论、修改，形成了标准外文版的征求意见稿。

(2) 征求意见阶段：

(3) 审查阶段：

(4) 报批阶段：

4、主要参加单位和工作组成员及其所做的工作

本标准项目成立翻译工作组，工作组成员情况如表1。

表1 工作组成员及分工情况表

序号	姓名	单位	职责及具体负责翻译章节
1	曾佳祺	九牧厨卫股份有限公司	负责第1章至第5章的翻译
2	陈良权	九牧厨卫股份有限公司	负责前言、附录的翻译以及汇总、统稿及各流程的报批工作
3	陈瑀	厦门市标准化研究院	负责全文英文标准规范性审核

(二) 标准编制原则和主要内容（如技术指标、参数、公式、性能要求、试验方法、检验规则等）的论据，解决的主要问题。修订标准时应列出与原标准的主要差异和水平对比

1、标准编制原则

- 1) 根据中文版GB/T 42065-2022《绿色产品评价 厨卫五金产品》进行全文翻译。
- 2) 根据GB/T 20000.10—2026《标准化活动规则 第10部分：国家标准英文译本的翻译》的要求进行校对。

2、标准主要内容说明

按中文版GB/T 42065-2022《绿色产品评价 厨卫五金产品》进行全文翻译。

（三）产业化情况、推广应用论证和预期达到的经济效益等情况

本次标准翻译推动了绿色制造领域标准化国际合作，服务“一带一路”国家战略，促进中国厨卫五金产品及标准“走出去”，增强中国在全球绿色供应链中的话语权。

（四）采用国际标准和国外先进标准情况，与国际、国外同类标准水平的对比情况，国内外关键指标对比分析或与测试的国外样品、样机的相关数据对比情况

本次标准翻译根据我国绿色产品评价厨卫五金产品标准进行翻译，不存在采标情况。

（五）与现行相关法律、法规、规章及相关标准，特别是强制性标准的协调性

与现行相关法律、法规、规章及强制性标准保持协调一致。

（六）重大分歧意见的处理经过和依据

本标准在翻译过程中无重大意见分歧。

（七）标准性质的建议说明

建议作为国家标准（外文版）发布。

（八）贯彻标准的要求和措施建议（包括组织措施、技术措施、过度办法、实施日期等）

建议尽快发布实施

（九）废止现行相关标准的建议

无。

（十）其它应予说明的事项

无其他说明事项。

《绿色产品评价 厨卫五金产品》国家标准外文版工作组

2026 年 7 月