ENVIRONMENTAL PRODUCT DECLARATION

BMT-EPD-2025-054

Declaration Owner: Chaozhou MITO Sanitary Ware Co.,Ltd

Assessment Body: Beijing Building Materials Testing Academy Co., Ltd.

Issue Date: 05/2025

Environmental Product Declaration（EPD）

EPD is a statement made by one or more organizations that expresses the environmental factors of a product or service based on quantitative environmental data on preset parameters. This type of statement is based on the life cycle assessment (LCA) method specified in the GB/T 24040 series of standards. It comprehensively quantitatively analyzes the potential environmental impact values of a product or service throughout its entire life cycle, from raw material acquisition, production, transportation, use, recycling and disposal until final disposal. These impact values include the depletion of non-renewable resources, climate change, ozone layer depletion, acidification, eutrophication, photochemical smog, particulate matter formation, human toxicity, ecological toxicity, and land use. When necessary, additional environmental information is included. It provides a report based on the GB/T 24025 standard, presenting scientific, comparable, and internationally recognized comprehensive environmental information of the product's entire life cycle.

This report is compiled in accordance with GB/T 24025 Environmental labels and declarations - Type III environmental declarations - Principles and procedures, and T/CBMF 284 Greenhouse gases-Quantification methods and requirements for carbon footprint of products-Architecture and sanitary ceramics. It can serve as supporting materials for enterprises to participate in related certifications, evaluations such as green building assessment, green product certification, green building material product certification, and green manufacturing system evaluation.

This report is prepared by Beijing Building Materials Testing Academy Co., Ltd. The on-site data is subject to the data provided and confirmed by the company, and SimaPro9.5 software is used for calculation and evaluation.

Basic Information

1.Company Information			
Declaration Owner	Chaozhou MITO Sanitary Ware Co.,Ltd.		
Address	No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City		
Factory	Chaozhou MITO Sanitary Ware Co.,Ltd.		
Address	No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City		
Unified social credit code	91445100MAC4A6QC7W	Corporate nature	Private enterprise
Corporate legal representative	Chugui Qiu	Contact person	Chunwei Chen
E-mail	mito-sale1@mito-cn.com	Contact number	13828369890
2.Product Information			
Product Name	Sanitary ceramics		
Functional unit	1t Sanitary ceramics（water absorption E≤0.5%）		
Standards	GB/T 24025 Environmental labels and declarations - Type III environmental declarations - Principles and procedures T/CBMF 284 Greenhouse gases-Quantification methods and requirements for carbon footprint of products-Architecture and sanitary ceramics		
System Boundary	From cradle to gate (incl. stages of raw materials production, transport, product manufacturing)		
Date Boundary	From 2024.01 to 2024.12		
3.AB information			
Assessment Body	Beijing Building Materials Testing Academy Co., Ltd.		
Address	No. 69, Jinding North Road, Shijingshan District, Beijing		
Legal representative	Guangming He	Contact person	Di Wang
E-mail	wangdi@bmtbj.cn	Contact number	18611216825
Issue date	29/05/2025		
4.Report review information			
Members of the evaluation team	杨嘉嘉		

Members of the review team	邵洪勇
Stamp of the institution: Beijing Building Materials Testing Academy Co., Ltd. （seal）	

Abstract

Impact category	Unit	Sanitary ceramics（1t）
Global warming	kg CO_2 eq.	1.39E+03
Stratospheric ozone depletion	kg CFC11 eq.	2.70E-04
Ionizing radiation	kBq Co-60 eq.	5.10E+00
Ozone formation, Human health	kg NO_x eq.	2.36E+00
Fine particulate matter formation	kg PM2.5 eq.	1.21E+00
Ozone formation, Terrestrial ecosystems	kg NO_x eq.	2.50E+00
Terrestrial acidification	kg SO_2 eq.	2.48E+00
Freshwater eutrophication	kg P eq.	6.74E-02
Marine eutrophication	kg N eq.	3.93E-02
Terrestrial ecotoxicity	kg 1,4-DCB eq.	1.82E+03
Freshwater ecotoxicity	kg 1,4-DCB eq.	7.58E-01
Marine ecotoxicity	kg 1,4-DCB eq.	1.90E+00
Human carcinogenic toxicity	kg 1,4-DCB eq.	1.01E+01
Human non-carcinogenic toxicity	kg 1,4-DCB eq.	1.62E+02
Land use	m^2a crop eq.	6.58E+01
Mineral resource scarcity	kg Cu eq.	4.09E+01
Fossil resource scarcity	kg oil eq.	4.20E+02
Water consumption	m^3	1.32E+01

Catalogue

1. Overview

1.1 About this report

Beijing Building Materials Testing Academy Co., Ltd.(hereinafter referred to as the AB) inspected the sanitary ceramics products produced by Chaozhou MITO Sanitary Ware Co.,Ltd. located in No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City carry out environmental product declaration work.

1.2 Company and product introduction

1.2.1 Company introduction

MITO is a large comprehensive enterprise specializing in the R&D, production, sales, and service of integrated bathroom products. Covering an area of approximately 100,000 square meters with a workforce of over 200 employees, the company boasts a dedicated R&D team, strong technical capabilities, and multiple independent intellectual property rights. Its current product line includes Wash basin,toilets, intelligent toilets, hardware accessories, bathroom cabinets, and smart mirrors.

2007: Invested 100 million yuan to upgrade the plant, with a total area of 300,000 square meters. It introduced more than 70 high-end sanitary ware production lines, including CNC kilns, automatic grading leak testing lines, automatic glazing assembly lines, and one-piece forming equipment, to meet the rapid growth of MITO's domestic and international markets.

2014: Invested in sanitary ceramic flushing function testing machine equipment. The newly developed 3L intelligent washing rotary flushing toilet achieved overall performance reaching or exceeding the advanced level of similar international products, and was awarded the "National Patent Protected Product" by the National

Patent Office.

R&D Strength: Driven by a dedicated team, continuous innovation ensures product technology aligns with international standards, with core patents covering intelligent flushing, water-saving, and other fields.

Management Certifications: Implemented multiple international management systems, including ISO9001:2015 Quality Management System, ISO14001:2015 Environmental Management System ,ensuring standardized production and management.

Global Presence: Serving customers in over 40 countries and regions across Europe, Asia, the Americas, and Australia, with a three-dimensional service system comprising production bases and after-sales service centers.

Quality Philosophy: Upholding the principle of "meticulous manufacturing, continuous improvement" and the business philosophy of "people-oriented, sustainable innovation", MITO builds a brand culture centered on brand core values. Products are certified by international organizations such as CE,Watermark.

Committed to the mission of "quality as life, building an international bathroom brand", MITO will continue to focus on developing environment-friendly, intelligent, healthy, and comfortable bathroom home products, creating a higher quality living experience for global consumers. The enterprise photo is shown in Figure 1-1.

Figure 1-1 Enterprise photo

1.2.2 Product and process introduction

The evaluated product is a sanitary ceramic product.

The key information of the product is presented in Table 1-1.

Table 1-1 Information overview table

Product Name	Sanitary ceramics
Specification and Model	Ceramic toilets, Ceramic washbasins
Production scale	annual production capacity is 600 tons
Main material	clay body(kaolin), clay body(clay), clay body (quartz), clay body(feldspar), clay body(porcelain stone), glaze (zirconium oxide), glaze (quartz), glaze (feldspar), glaze(steatite), ABS plumbing fittings, POM plumbing fittings, tap water etc.
Main consumption of energy	electricity, natural gas, etc.

2. Life Cycle Assessment

2.1 Sanitary ceramics

2.1.1 Goal and Scope Definition

2.1.1.1 Goal

This report is used to evaluate the environmental impact of the life cycle of the sanitary ceramics products produced by Chaozhou MITO Sanitary Ware Co.,Ltd., released publicly, and does not act as a comparison judgment.

2.1.1.2 Functional unit

The functional unit defined in this report is "1 t sanitary ceramics".

2.1.1.3 System Boundary

The system boundary: from cradle to gate (incl. stages of raw materials production, transport, product manufacturing), refer to Figure 2-1.

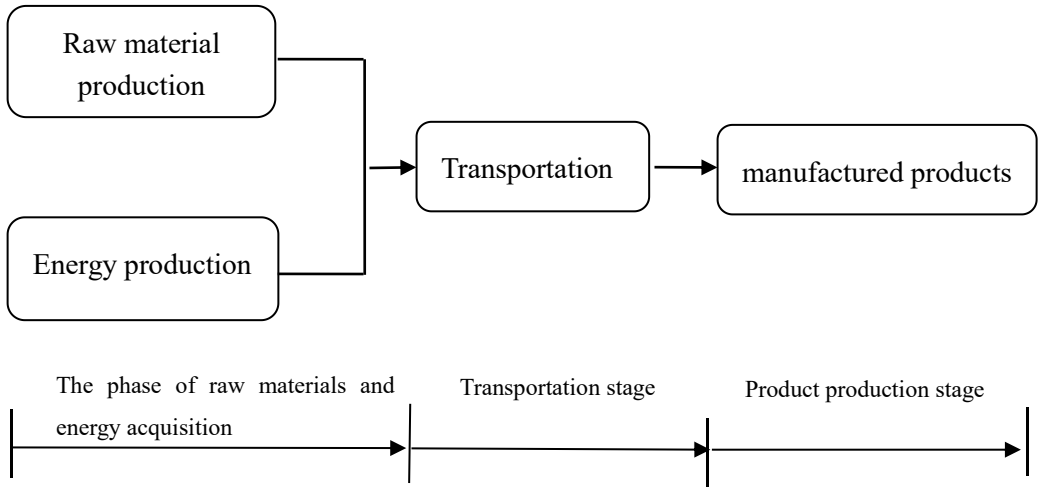


Figure 2-1 system boundary

2.1.2 Inventory Analysis

2.1.2.1 Data collection and representative

（1）Foreground data collection

Foreground data includes raw material consumption, energy consumption, pollutant emissions, and transportation data (transportation methods, distance, transport volume), etc., and the statistical cycle is 12 consecutive months from January 2024 to December 2024. Foreground data was obtained through the production site survey of Chaozhou MITO Sanitary Ware Co.,Ltd., and the data was really effective. The source of foreground date is shown in Table 2-1, and the foreground date collection form is presented in Appendix A.

Table 2-1 foreground data sources

Project		Sources
Product output		Enterprise production statement
Raw material consumption		Enterprise production statement
Energy consumption		Enterprise production statement
Raw material and energy transportation distance		Based on its place of origin
Pollutant	carbon dioxide	Particulate matter, nitrogen oxides, sulfur dioxide, COD, BOD5, ammonia nitrogen, total phosphorus, total copper, etc. are obtained based on the third-party environmental testing reports provided by enterprises. Other pollutants are estimated based on the consumption of fossil energy used in production, default calorific value (taken from the China Energy Statistical Yearbook), and emission factors (taken from the IPCC and EEA reports).
	Others	

（2）Background data collection

Background data refers to the data on resource and energy consumption, as well as pollutant emissions, during the processes of obtaining raw materials, transportation, and energy production related to product manufacturing beyond the operational boundaries of the enterprise. This background data is mainly sourced from the Ecoinvent database.

2.1.2.2 Input and output choice guidelines

The contributions of the single material flow or unit process on the neglect must not exceed 1% of the environmental impact, and the total contribution of the environmental impact on the environment is not more than 5%.

2.1.2.3 Date quality evaluation

（1）Foreground data quality evaluation

a) Integration: The foreground data collected the production statistics of the enterprise within the statistical period. The data collection process does not have a missing process, consumption and emissions.

b) Accuracy: The product output, energy consumption, and raw material consumption data in the foreground data come from the actual production statistics of the enterprise; the environmental emission data (particulate matter, nitrogen oxides, sulfur dioxide, COD, BOD5, ammonia nitrogen, total phosphorus, and total copper) are derived from the three-waste testing reports, carbon dioxide and other greenhouse gases are consumed by the consumption of fossil energy, and the default heat value (from the Chinese Energy Statistical Yearbook) and emission factor (from the IPCC report and EEA report) estimation; the original data, data sources, and calculation process are clear.

c) Consistency: Similar data is maintained with the same data sources, statistical caliber, processing rules, etc. during the collection of corporate foreground data.

（2）Background data quality evaluation

a) Representative: Preferential selection of the relevant PCR standard requirements provided by the raw material supplier of the enterprise, and the upstream product data of the upstream product data independently verified by the third party as the background data. Second, select publicly available life cycle assessment (LCA) data from recent years that represent domestic and industry-average production levels. Then, use foreign data on similar technologies as background reference data.

b) Integration: The background data set is complete, the input and output stream information of the background data list is complete, and the background data such as the production equipment of the enterprise are abandoned according to the formulation rules formulated.

c) Consistency: This agency's choice of background data of similar products is consistent. When the background data is updated, this report should also be updated.

2.1.2.4 Allocation method

During the production process of this enterprise, the production raw materials and energy consumption cannot be measured separately, and the quality distribution method is adopted for distribution.

2.1.3 Life Cycle Impact Assessment

2.1.3.1 Life Cycle Impact Assessment methodology

Using the ReCiPe midpoint (H) V1.08 method system to conduct environmental impact assessment of the product. This method system involves type 18 environmental impact indicators. Evaluation software uses SimaPro9.5.

2.1.3.2 Results of life cycle assessment

This report uses the ReCiPe midpoint(H) V1.08 method system to evaluate the environmental impact of the product life cycle list. With the help of Soft-ware calculation function unit (1t sanitary ceramic products) various environmental impact indicators and the contribution rate of various units process. The results are shown in table 2-2 and figure 2-2.

Table 2-2 Environmental impact index calculation results and process contribution (1)

Environmental impact index value			The proportion of contributions on each type of environment on each type*										
			Product	Raw material production									
Impact category	unit	total	Sanitary ceramics	Clay body(kaolin)	Clay body(clay)	Clay body (quartz)	Clay body(feldspar)	Clay body(porcelain stone)	Glaze (zirconium oxide)	Glaze (quartz)	Glaze (feldspar)	Glaze (marble)	Glaze (kaolin)
Global warming	kg CO_2 eq.	1.39E+03	42.48%	2.06%	0.54%	0.42%	0.75%	2.06%	4.09%	0.14%	0.11%	2.67%	0.13%
Stratospheric ozone depletion	kg CFC11 eq.	2.70E-04	4.28%	3.64%	0.80%	0.57%	1.09%	3.64%	14.97%	0.19%	0.16%	3.17%	0.24%
Ionizing radiation	kBq Co-60 eq.	5.10E+00	-	4.65%	0.22%	0.13%	0.55%	4.65%	6.07%	0.04%	0.08%	3.20%	0.30%
Ozone formation, Human health	kg NOx eq.	2.36E+00	16.72%	2.71%	1.88%	1.07%	1.84%	2.71%	8.58%	0.36%	0.28%	1.95%	0.18%
Fine particulate matter formation	kg PM2.5 eq.	1.21E+00	5.86%	4.28%	1.32%	0.95%	1.10%	4.28%	9.75%	0.31%	0.16%	3.31%	0.28%
Ozone formation, Terrestrial ecosystems	kg NOx eq.	2.50E+00	15.78%	2.63%	1.84%	1.04%	1.81%	2.63%	8.26%	0.34%	0.27%	1.87%	0.17%
Terrestrial acidification	kg SO_2 eq.	2.48E+00	6.61%	4.41%	1.47%	1.14%	1.16%	4.41%	10.85%	0.38%	0.17%	3.22%	0.29%
Freshwater eutrophication	kg P eq.	6.74E-02	48.59%	1.86%	0.43%	0.23%	0.24%	1.86%	6.34%	0.08%	0.04%	3.00%	0.12%
Marine eutrophication	kg N eq.	3.93E-02	30.22%	0.35%	0.38%	0.17%	0.33%	0.35%	1.99%	0.06%	0.05%	1.20%	0.02%
Terrestrial ecotoxicity	kg 1,4-DCB eq.	1.82E+03	-	4.85%	6.06%	1.72%	3.34%	4.85%	13.05%	0.57%	0.50%	7.75%	0.32%
Freshwater ecotoxicity	kg 1,4-DCB eq.	7.58E-01	-	2.73%	3.42%	1.07%	2.20%	2.73%	6.95%	0.36%	0.33%	2.60%	0.18%
Marine ecotoxicity	kg 1,4-DCB eq.	1.90E+00	-	3.59%	4.46%	1.38%	2.74%	3.59%	9.72%	0.46%	0.41%	4.12%	0.23%
Human carcinogenic toxicity	kg 1,4-DCB eq.	1.01E+01	-	2.17%	6.71%	0.62%	1.49%	2.17%	7.85%	0.20%	0.22%	1.81%	0.14%
Human non-carcinogenic toxicity	kg 1,4-DCB eq.	1.62E+02	-	4.67%	3.34%	0.77%	1.12%	4.67%	11.87%	0.26%	0.17%	3.24%	0.30%
Land use	m^2a crop eq.	6.58E+01	-	1.01%	0.77%	1.34%	1.71%	1.01%	18.37%	0.44%	0.26%	1.11%	0.07%
Mineral resource scarcity	kg Cu eq.	4.09E+01	-	0.13%	17.56%	0.03%	0.07%	0.13%	79.07%	0.01%	0.01%	0.20%	0.01%
Fossil resource scarcity	kg oil eq.	4.20E+02	-	1.78%	0.48%	0.34%	0.78%	1.78%	3.45%	0.11%	0.12%	1.52%	0.12%
Water consumption	m^3	1.32E+01	-	3.40%	0.27%	1.20%	2.96%	3.40%	12.18%	0.40%	0.44%	1.23%	0.22%

*Note: "-" means that the proportion of contribution of a certain process on a certain type of environment is less than one in 10,000. The total contribution of the rest of the raw materials on the environment does not exceed 1%, and it is not included in this table.

Table 2-2 Environmental impact index calculation results and process contribution (2)

Environmental impact index value			The proportion of contributions on each type of environment on each type*									
			Raw material production							Energy production		Transportation
Impact category	unit	total	Glaze（steatite）	ABS plumbing fittings	POM plumbing fittings	PP cover plate	Urea-formaldehyde resin cover plate	Corrugated box	Tap water	Natural gas	Electricity	Raw material transportation-high way
Global warming	kg CO_2 eq.	1.39E+03	0.27%	3.94%	1.83%	5.44%	2.91%	5.71%	0.35%	9.03%	14.77%	0.29%
Stratospheric ozone depletion	kg CFC11 eq.	2.70E-04	0.49%	0.83%	1.46%	3.18%	3.10%	21.98%	0.87%	9.11%	25.84%	0.41%
Ionizing radiation	kBq Co-60 eq.	5.10E+00	0.05%	0.18%	27.23%	2.32%	1.36%	6.06%	0.80%	2.18%	39.86%	0.07%
Ozone formation, Human health	kg NOx eq.	2.36E+00	1.64%	3.62%	1.00%	6.61%	4.64%	9.91%	0.52%	13.34%	19.65%	0.80%
Fine particulate matter formation	kg PM2.5 eq.	1.21E+00	0.75%	3.52%	0.85%	6.26%	5.26%	10.09%	0.80%	6.35%	34.12%	0.39%
Ozone formation, Terrestrial ecosystems	kg NOx eq.	2.50E+00	1.59%	3.70%	0.98%	6.66%	4.72%	9.80%	0.51%	15.69%	18.90%	0.79%
Terrestrial acidification	kg SO_2 eq.	2.48E+00	0.73%	4.97%	1.30%	8.06%	6.48%	9.87%	0.68%	7.17%	26.21%	0.43%
Freshwater eutrophication	kg P eq.	6.74E-02	0.06%	1.43%	2.88%	2.32%	1.99%	10.94%	0.35%	2.08%	15.10%	0.07%
Marine eutrophication	kg N eq.	3.93E-02	0.17%	2.77%	0.46%	0.80%	1.87%	56.13%	0.07%	0.84%	1.51%	0.28%
Terrestrial ecotoxicity	kg 1,4-DCB eq.	1.82E+03	0.37%	1.48%	0.51%	8.30%	14.25%	16.20%	0.74%	4.37%	7.19%	3.58%
Freshwater ecotoxicity	kg 1,4-DCB eq.	7.58E-01	0.50%	7.36%	14.67%	5.97%	6.16%	23.95%	1.29%	7.98%	6.93%	2.65%
Marine ecotoxicity	kg 1,4-DCB eq.	1.90E+00	0.53%	4.69%	8.24%	7.01%	10.18%	17.11%	1.06%	9.75%	7.88%	2.85%
Human carcinogenic toxicity	kg 1,4-DCB eq.	1.01E+01	0.70%	4.53%	1.81%	5.99%	18.75%	9.60%	5.29%	18.08%	11.38%	0.49%
Human non-carcinogenic toxicity	kg 1,4-DCB eq.	1.62E+02	0.22%	1.39%	3.11%	6.74%	9.64%	22.76%	0.88%	4.56%	19.49%	0.80%
Land use	m^2a crop eq.	6.58E+01	2.93%	0.14%	-	0.94%	1.94%	59.50%	0.14%	3.19%	4.82%	0.33%
Mineral resource scarcity	kg Cu eq.	4.09E+01	0.04%	0.05%	0.06%	0.35%	0.59%	0.44%	0.09%	0.87%	0.29%	0.03%
Fossil resource scarcity	kg oil eq.	4.20E+02	0.26%	5.64%	0.27%	12.91%	3.92%	4.73%	0.28%	49.25%	11.95%	0.30%
Water consumption	m^3	1.32E+01	0.05%	5.00%	1.70%	1.56%	7.85%	5.27%	40.31%	1.93%	10.53%	0.10%

*Note: "-" means that the proportion of contribution of a certain process on a certain type of environment is less than one in 10,000. The total contribution of the rest of the raw materials on the environment does not exceed 1%, and it is not included in this table.

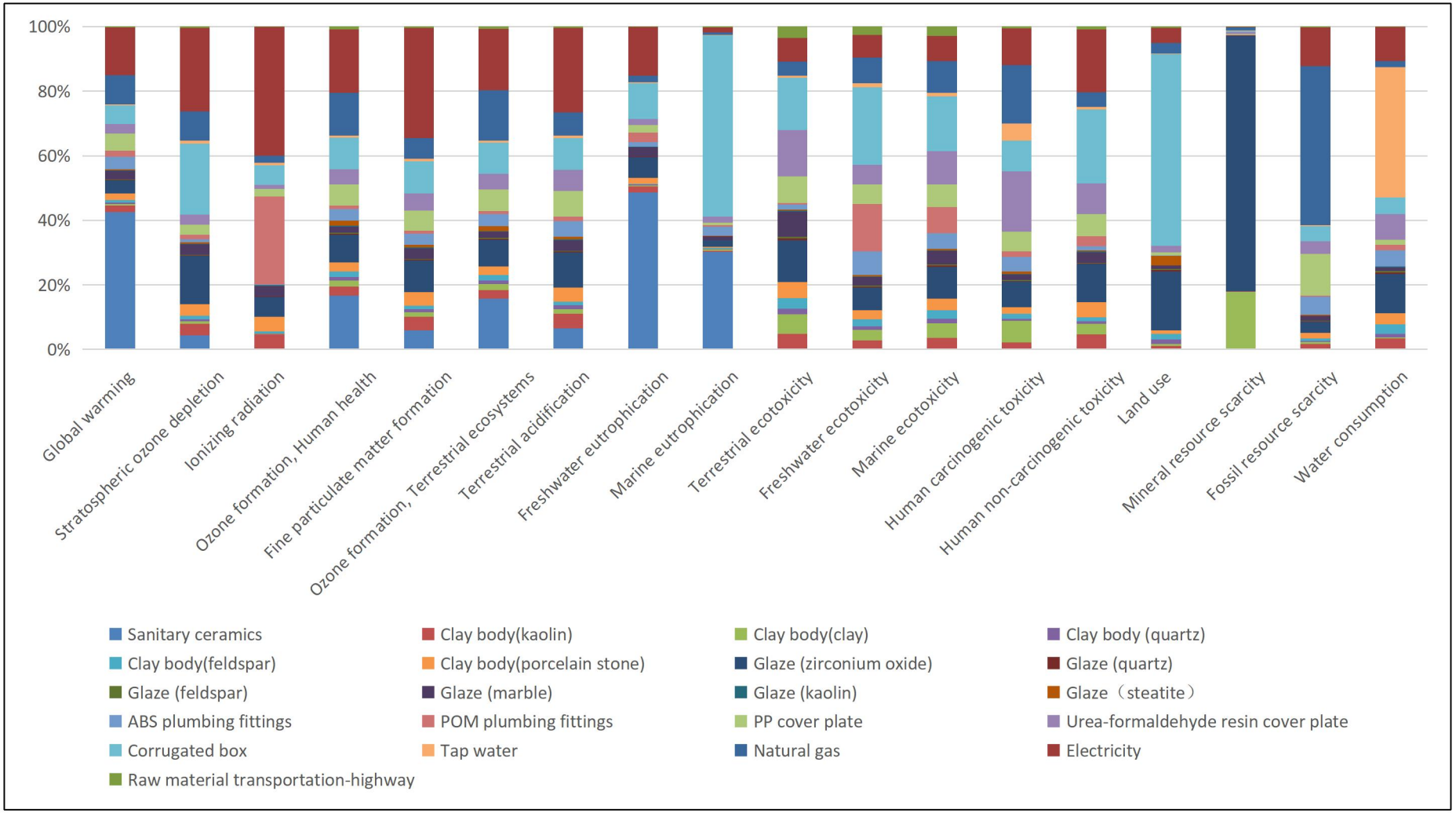


Figure 2-2 Analysis of the contribution of each unit process in each type of environmental impact indicators

2.1.3.3 Additional environment information

None.

2.1.3.4 Comparable

This EPD report is used to evaluate the environmental impact status of the product production process, publicly released, and does not act as a comparative assertion.

Appendix A: On-site Data Acquisition Form

表 1 现场数据采集表

（不公开）

企业信息	企业名称	潮州市麦禾卫浴有限公司		
	企业地址	潮州市潮安区凤塘镇英凤村前面路南侧 7 号之一厂房		
	统一社会信用代码	91445100MAC4A6QC7W	企业性质	民营企业
	企业法定代表人	邱楚桂	企业联系人	陈纯薇
	联系人电话	13828369890	电子邮件	mito-sale1@mito-cn.com
	产品名称/规格型号	陶瓷马桶/陶瓷洗手盆 吸水率：0.5%以下	产量	4800 吨
	生产线规模/设计产能	50 条生产线 2 条自动流水线/产能 600 吨		
	数据统计周期	2024.01~2024.12		

	种类/材质成分	消耗量	单位	详细情况说明
原材料消耗	泥料（高岭土）	650	吨	取得方式：采购 运输方式：陆运 运输距离：15 km
	泥料（粘土）	3250	吨	取得方式：采购 运输方式：陆运 运输距离 15 km
	泥料（石英）	650	吨	取得方式：采购 运输方式：陆运 运输距离 15 km
	泥料（长石）	1300	吨	取得方式：采购 运输方式：陆运 运输距离 15 km
	泥料（瓷石）	650	吨	取得方式：采购 运输方式：陆运 运输距离 15 km
	釉料（氧化锆）	65	吨	取得方式：采购 运输方式：陆运 运输距离：5 km
	釉料（石英）	214.5	吨	取得方式：采购 运输方式：陆运 运输距离：5 km
	釉料（长石）	195	吨	取得方式：采购 运输方式：陆运 运输距离：5 km
	釉料（大理）	100.7	吨	取得方式：采购 运输方式：陆运 运输距离：5 km
	釉料（高岭土）	42.3	吨	取得方式：采购 运输方式：陆运 运输距离：5 km

Internal Communication: For internal & partner use only. 1

	釉料（滑石）	32.5	吨	取得方式：采购 运输方式：陆运 运输距离：5 km
	水	26400	m^3	自来水
配件消耗	塑料水件（ABS+POM 水阀）	ABS	54t	取得方式：外购 产地：潮州市 运输方式：公路 运输距离：15 km
		POM	36t	取得方式：外购 运输方式：公路 运输距离：5 km
	塑料盖板（PP/脲醛树脂）	PP	152t	取得方式：外购 产地：潮州市 运输方式：公路 运输距离：5 km
		UF	84t	取得方式：外购 产地：xx 市 xx 区 运输方式：公路 运输距离：5 km
包装材料	包装箱/瓦楞纸	纸箱	285t	取得方式：外购 产地：潮州市 运输方式：公路 运输距离：5 km
能源消耗	种类	消耗量	单位	详细情况说明
	天然气	105 万	立方	取得方式：外购 运输距离：20 km
	电力	138 万	kWh	包含生产、办公用电

特征污染物	种类		单位	数据来源	详细情况说明	
	大气污染物	颗粒物	0.100989	t	环保税核算表	/
		二氧化硫	0.106097	t	环保税核算表	/
		氮氧化物	1.891133	t	环保税核算表	/
		硫酸雾	0	t	环保税核算表	/
		铬酸雾	0	t	环保税核算表	/
		挥发性有机物	0	t	环保税核算表	/
		硫化氢	0	t	环保税核算表	/
		非甲烷总酊	0	t	环保税核算表	/
		氯化氢	0	t	环保税核算表	/
		铅及化合物	0	t	环保税核算表	/
	二氧化碳		/	t	/	/
	水污染物	COD	14	t	监测报告	/
		BOD5	3.5	t	监测报告	/
		SS	0	t	监测报告	/
		氨氮	0192	t	监测报告	/
		总氮	0	t	监测报告	/
		总磷	0.03	t	监测报告	/

		溶解性总固体	0	t	监测报告	/
		石油类	0	t	监测报告	/
		动植物油	0	t	监测报告	/
		总铜	0.15	t	监测报告	/

Type III Environmental Declaration（EPD）

Certificate Number: BMT-EPD-2025-054

Declaration Owner:	**Chaozhou MITO Sanitary Ware Co.,Ltd** No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City
Manufacture:	**Chaozhou MITO Sanitary Ware Co.,Ltd** No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City
Standards:	GB/T 24025 Environmental labels and declarations — Type III environmental declarations — Principles and procedures T/CBMF 284 Greenhouse gases-Quantification methods and requirements for carbon footprint of products-Architecture and sanitary ceramics
Declared Product:	Sanitary ceramics
Specification and Model:	Ceramic toilets, Ceramic washbasins
Functional Unit:	1t Sanitary ceramics product（water absorption E≤0.5%）

Results of life cycle impact assessment (Provided in Annex)

Issue Date: May 29th, 2025 **Validto:** May 28th, 2028

The annual validity of this certificate is maintained under the follow up inspection of the certificate authority.

Issued by:

Name of Certificate Authority (seal):
Beijing Building Materials Testing Academy Co., Ltd.

Beijing Building Materials Testing Academy Co., Ltd.
No.69, Jinding North Road, Shijingshan District, Beijing, P.R.China
www.bmtbj.cn

Type III Environmental Declaration (EPD)

Annex

Certificate Number: BMT-EPD-2025-054

System Boundary: From cradle to gate (incl. stages of raw materials production, transport, product manufacturing)

Data Boundary: From 2024.1 to 2024.12

LCIA Method: ReCiPe 2016 V1.08

The results of life cycle impact assessment

Serial number	Impact category	Value	Unit
1	Global warming	1.39E+03	kg CO_2 eq.
2	Fine particulate matter	1.21E+00	kg PM2.5 eq.
3	Terrestrial acidification	2.48E+00	kg oil eq.
4	Human carcinogenic	1.01E+01	m^2a crop eq
5	Human non-carcinogenic	1.01E+01	kg 1,4-DCB eq.
6	Mineral resource scarcity	1.01E+01	kg 1,4-DCB eq.
7	Fossil resource scarcity	1.01E+01	kg SO_2 eq.

Note:This annex is valid only when used together with the certificate.

Issue Date: May 29th, 2025 **Valid to:** May 28th, 2028

Issued by:

Name of Certificate Authority (seal):
Beijing Building Materials Testing Academy Co., Ltd.

Beijing Building Materials Testing Academy Co., Ltd.
No.69, Jinding North Road, Shijingshan District, Beijing, P.R.China
www.bmtbj.cn

CARBON FOOTPRINT OF PRODUCTS

BMT-CFP-2025-059

Declaration Owner: Chaozhou MITO Sanitary Ware Co.,Ltd

Assessment Body: Beijing Building Materials Testing Academy Co., Ltd.

Issue Date: 05/2025

Carbon Footprint of Products（CFP）

Research from countries around the world indicates that climate warming caused by greenhouse gas (GHG) emissions at the current stage has brought significant negative impacts on Earth's ecosystems, and has therefore attracted substantial attention and concern from the international community. Under such circumstances, the product carbon footprint (Carbon footprint of products, CFP) has emerged.

Carbon footprint refers to the summary of greenhouse gas emissions and absorptions based on the life cycle assessment method within a product system, expressed in the form of carbon dioxide equivalents. That is, the greenhouse gas emissions of a certain product during all stages from raw materials to production (or service provision), distribution, use, disposal/recycling, etc. The scope includes greenhouse gases such as CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, and NF_3, etc. This report only calculates CO_2, CH_4 and N_2O, which account for a relatively large proportion of the three gases. It can help individuals and organizations assess their impact on environmental factors of greenhouse gases and provide effective information for environmental reports. For enterprises, it is an embodiment of social responsibility. Based on the determined product carbon footprint, enterprises can reduce their carbon emission behaviors and take feasible measures to control and reduce carbon emissions, enhance reputation and brand strength, improve internal operations, save energy and reduce emissions, and gain competitive advantages. In addition, CFP is also an effective identifier to guide consumers' environmentally friendly behaviors and make consumption decisions.

This report is compiled in accordance with GB/T 24067 Greenhouse gases-Carbon footprint of products-Requirements and guidelines for quantification, PAS 2050 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services, and T/CBMF 284 Greenhouse gases-Quantification methods and requirements for carbon footprint of products-Architecture and sanitary

ceramics. It can serve as supporting materials for enterprises to participate in relevant certification/evaluation work such as green building assessment, green product certification, green building materials product certification, and green manufacturing system evaluation.

This report is prepared by Beijing Building Materials Testing Academy Co., Ltd.The on-site data is subject to the data provided and confirmed by the company, and SimaPro9.5 software is used for calculation and evaluation.

Basic Information

1.Company Information			
Declaration Owner	Chaozhou MITO Sanitary Ware Co.,Ltd		
Address	No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City		
Manufacture	Chaozhou MITO Sanitary Ware Co.,Ltd		
Address	No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City		
Unified social credit code	91445100MAC4A6QC7W	Corporate nature	Private enterprise
Corporate legal representative	Chugui Qiu	Contact person	Chunwei Chen
E-mail	mito-sale1@mito-cn.com	Contact number	13828369890
2.Product Information			
Product Name	Sanitary ceramics		
Functional unit	1t Sanitary ceramics（water absorption E≤0.5%）		
Standards	GB/T 24067 Greenhouse gases-Carbon footprint of products-Requirements and guidelines for quantification PAS 2050 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services T/CBMF 284 Greenhouse gases-Quantification methods and requirements for carbon footprint of products-Architecture and sanitary ceramics		
System Boundary	From cradle to gate (incl. stages of raw materials production, transport, product manufacturing)		
Date Boundary	From 2024.01 to 2024.12		
3.AB information			
Assessment Body	Beijing Building Materials Testing Academy Co., Ltd.		
Address	No. 69, Jinding North Road, Shijingshan District, Beijing		
Legal representative	Guangming He	Contact person	Di Wang
E-mail	wangdi@bmtbj.cn	Contact number	18611216825
Issue date	29/05/2025		
4.Report review information			

Members of the evaluation team	杨潇潇
Members of the review team	邓洪勇

Beijing Building Materials Testing Academy Co., Ltd.

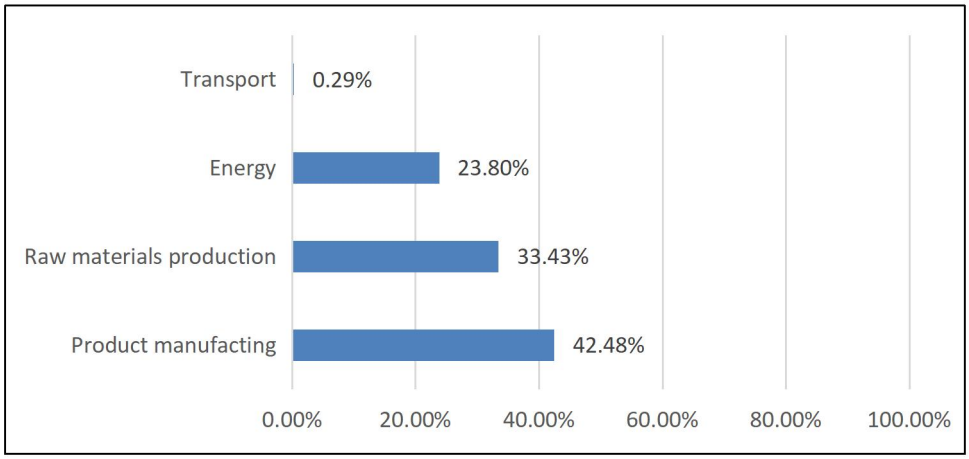
（Seal）

Abstract of Carbon Footprint Results for Products

Product Name: Sanitary ceramics

Specification and Model: Ceramic toilets, Ceramic washbasins

The carbon footprint of producing 1t of Sanitary ceramics（water absorption E≤0.5%） products: 1388 kg CO_2 eq.



The proportion of carbon footprint contributions of the product during each stage of its life cycle

Catalogue

1. Overview

1.1 About this report

Beijing Building Materials Testing Academy Co., Ltd.(hereinafter referred to as the AB) inspected the sanitary ceramics products produced by Chaozhou MITO Sanitary Ware Co.,Ltd. located in No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City carry out the assessment of carbon footprints.

1.2 Company and product introduction

1.2.1 Company introduction

MITO is a large comprehensive enterprise specializing in the R&D, production, sales, and service of integrated bathroom products. Covering an area of approximately 100,000 square meters with a workforce of over 200 employees, the company boasts a dedicated R&D team, strong technical capabilities, and multiple independent intellectual property rights. Its current product line includes Wash basin,toilets, intelligent toilets, hardware accessories, bathroom cabinets, and smart mirrors.

2007: Invested 100 million yuan to upgrade the plant, with a total area of 300,000 square meters. It introduced more than 70 high-end sanitary ware production lines, including CNC kilns, automatic grading leak testing lines, automatic glazing assembly lines, and one-piece forming equipment, to meet the rapid growth of MITO's domestic and international markets.

2014: Invested in sanitary ceramic flushing function testing machine equipment. The newly developed 3L intelligent washing rotary flushing toilet achieved overall performance reaching or exceeding the advanced level of similar international products, and was awarded the "National Patent Protected Product" by the National

Patent Office.

R&D Strength: Driven by a dedicated team, continuous innovation ensures product technology aligns with international standards, with core patents covering intelligent flushing, water-saving, and other fields.

Management Certifications: Implemented multiple international management systems, including ISO9001:2015 Quality Management System, ISO14001:2015 Environmental Management System ,ensuring standardized production and management.

Global Presence: Serving customers in over 40 countries and regions across Europe, Asia, the Americas, and Australia, with a three-dimensional service system comprising production bases and after-sales service centers.

Quality Philosophy: Upholding the principle of "meticulous manufacturing, continuous improvement" and the business philosophy of "people-oriented, sustainable innovation", MITO builds a brand culture centered on brand core values. Products are certified by international organizations such as CE,Watermark.

Committed to the mission of "quality as life, building an international bathroom brand", MITO will continue to focus on developing environment-friendly, intelligent, healthy, and comfortable bathroom home products, creating a higher quality living experience for global consumers. The enterprise photo is shown in Figure 1-1.

Figure 1-1 Enterprise photo

1.2.2 Product and process introduction

The evaluated product is a sanitary ceramic product.

The key information of the product is presented in Table 1-1.

Table 1-1 Information overview table

Product Name	Sanitary ceramics
Specification and Model	Ceramic toilets, Ceramic washbasins
Production scale	annual production capacity is 600 tons
Main material	clay body(kaolin), clay body(clay), clay body (quartz), clay body(feldspar), clay body(porcelain stone), glaze (zirconium oxide), glaze (quartz), glaze (feldspar), glaze(steatite), ABS plumbing fittings, POM plumbing fittings, tap water etc.
Main consumption of energy	electricity, natural gas, etc.

2. Carbon Footprint of Products Assessment

2.1 Sanitary ceramics

2.1.1 Goal and Scope Definition

2.1.1.1 Goal

This report is used to evaluate the carbon footprint of the sanitary ceramics products produced by Chaozhou MITO Sanitary Ware Co.,Ltd., released publicly, and does not act as a comparison judgment.

2.1.1.2 Functional unit

The functional unit defined in this report is "1 t sanitary ceramics".

2.1.1.3 System Boundary

The system boundary: from cradle to gate (incl. stages of raw materials production, transport, product manufacturing), refer to Figure 2-1.

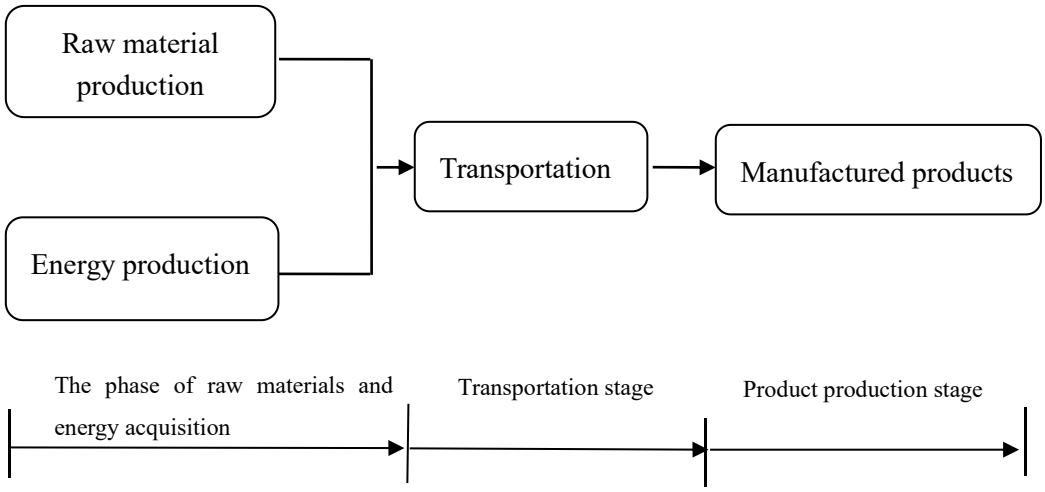


Figure 2-1 system boundary

2.1.2 Inventory Analysis

2.1.2.1 Data collection and representative

（1）Foreground data collection

Foreground data includes raw material consumption, energy consumption, greenhouse gases emission, and transportation data (transportation methods, distance, transport volume). The statistical cycle is 12 consecutive months from January 2024 to December 2024. Foreground data was obtained through the production site survey of Chaozhou MITO Sanitary Ware Co.,Ltd., and the source of foreground date is shown in Table 2-1, and the foreground date collection form is presented in Appendix A.

Table 2-1 foreground data sources

Project		Sources
Product output		Enterprise production statement
Raw material consumption		Enterprise production statement
Energy consumption		Enterprise production statement
Raw material and energy transportation distance		Based on its place of origin
Greenhouse gases	carbon dioxide	Particulate matter, nitrogen oxides, sulfur dioxide, COD, BOD5, ammonia nitrogen, total phosphorus, total copper, etc. are obtained based on the third-party environmental testing reports provided by enterprises. Other pollutants are estimated based on the consumption of fossil energy used in production, default calorific value (taken from the China Energy Statistical Yearbook), and emission factors (taken from the IPCC and EEA reports).
	Others	

（2）Background data collection

Background data refers to the data on resource and energy consumption as well as pollutant emissions during the processes of obtaining raw materials, transportation and energy production related to product manufacturing beyond the operational boundaries of enterprises. The background data comes from the Ecoinvent database.

2.1.2.2 Data quality evaluation

(1) Foreground data quality evaluation

a) Integration: The foreground data collected production statistics from January 2024 to December 2024 (12 consecutive months). The data collection process does not have a missing process, consumption and emissions.

b) Accuracy: The product output, energy consumption, and raw material consumption data in the foreground data come from the actual production statistics of the enterprise; in the environmental emission data (particulate matter, nitrogen oxides, sulfur dioxide, COD, BOD5, ammonia nitrogen, total phosphorus, and total copper), carbon dioxide and other greenhouse gases are consumed by the consumption of fossil energy, and the default heat value (from the Chinese Energy Statistical Yearbook) and emission factor (from the IPCC report and EEA report) estimation; the original data, data sources, and calculation process are clear.

c) Consistency:Similar data is maintained with the same data sources, statistical caliber, processing rules, etc. during the collection of corporate foreground data.

(2) Background data quality evaluation

a) Representative: Preferential selection of the relevant PCR standard requirements provided by the raw material supplier of the enterprise, and the upstream product data of the upstream product data independently verified by the third party as the background data. Second, select publicly available life cycle assessment (LCA) data from recent years that represent domestic and industry-average production levels, and last, use foreign data on similar technologies as background reference data.

b) Integration: The background data set is complete, the input and output stream information of the background data list is complete, and the background data such as the production equipment of the enterprise are abandoned according to the formulation rules formulated.

c) Consistency: This agency's choice of background data of similar products is consistent. When the background data is updated, this report should also be updated.

2.1.3 Carbon Footprint Life Cycle Impact Assessment

2.1.3.1 Life Cycle Impact Assessment methodology

Using the ReCiPe midpoint (H) V1.08 method system to conduct the carbon footprint assessment for the product. The environmental impact indicator is global warming (Climate change). Evaluation software uses SimaPro9.5.

2.1.3.2 Life Cycle Impact Assessment results of Product Carbon Footprint

This report uses the ReCiPe midpoint(H) V1.08 method system to evaluate the environmental impact of the product life cycle inventory. The product carbon footprint is analyzed only by selecting the "global warming" environmental impact indicator. With the help of the SimaPro software's calculation function, the global warming index value (i.e., the product carbon footprint) of the unit product and the contribution proportion of each process of the product to the carbon footprint are calculated. The results are presented in Table 2-2 and Figure 2-2. Among them, Table 2-2 includes the CO_2, N_2O, CH_4 and other greenhouse gas emissions (converted to carbon dioxide equivalents) at each stage of the product and the total amount of greenhouse gas emissions.

Table 2-2 Greenhouse gas emissions by product life cycle stage

Process	Project	CO_2	N_2O	CH_4	Other greenhouse gases	Total emissions of greenhouse gases
	Unit	kg CO_2 eq.	kg CO_2 eq.	kg CO_2 eq.	kg CO_2 eq.	kg CO_2 eq.
Product production	Sanitary ceramics	5.89E+02	3.13E-01	3.78E-01	0.00E+00	5.90E+02
Raw materials production	Clay body(kaolin)	2.50E+01	2.16E-01	3.24E+00	1.09E-01	2.86E+01
	Clay body(clay)	6.67E+00	5.44E-02	7.77E-01	1.82E-02	7.52E+00
	Clay body (quartz)	5.22E+00	3.99E-02	6.03E-01	4.71E-03	5.87E+00
	Clay body(feldspar)	9.09E+00	7.44E-02	1.16E+00	1.60E-02	1.03E+01
	Clay body(porcelain stone)	2.50E+01	2.16E-01	3.24E+00	1.09E-01	2.86E+01
	Glaze (zirconium oxide)	5.09E+01	6.03E-01	4.97E+00	2.50E-01	5.68E+01
	Glaze (quartz)	1.73E+00	1.32E-02	2.00E-01	1.56E-03	1.94E+00
	Glaze (feldspar)	1.36E+00	1.11E-02	1.74E-01	2.39E-03	1.55E+00
	Glaze (marble)	3.10E+01	1.72E-01	5.84E+00	7.71E-02	3.70E+01
	Glaze (kaolin)	1.63E+00	1.41E-02	2.11E-01	7.14E-03	1.86E+00
	Glaze（steatite）	3.41E+00	3.43E-02	3.65E-01	3.40E-03	3.81E+00
	ABS plumbing fittings	4.20E+01	4.44E-02	1.27E+01	6.93E-03	5.47E+01
	POM plumbing fittings	2.21E+01	6.20E-02	3.27E+00	1.38E-02	2.54E+01
	PP cover plate	5.95E+01	2.22E-01	1.57E+01	7.64E-02	7.55E+01

Raw materials production	Urea-formaldehyde resin cover plate	3.34E+01	1.96E-01	6.75E+00	7.46E-02	4.04E+01
	Corrugated box	6.24E+01	1.52E+00	1.52E+01	1.74E-01	7.93E+01
	Tap water	4.20E+00	3.84E-02	5.75E-01	2.35E-02	4.84E+00
Energy Production	Natural gas	6.05E+01	3.08E-01	6.43E+01	2.25E-01	1.25E+02
	Electricity	1.79E+02	1.86E+00	2.44E+01	2.85E-02	2.05E+02
Transportation	Raw material transportation-high	3.52E+00	2.84E-02	4.04E-01	3.98E-03	3.96E+00
Carbon footprint of each functional unit product						**1.39E+03**

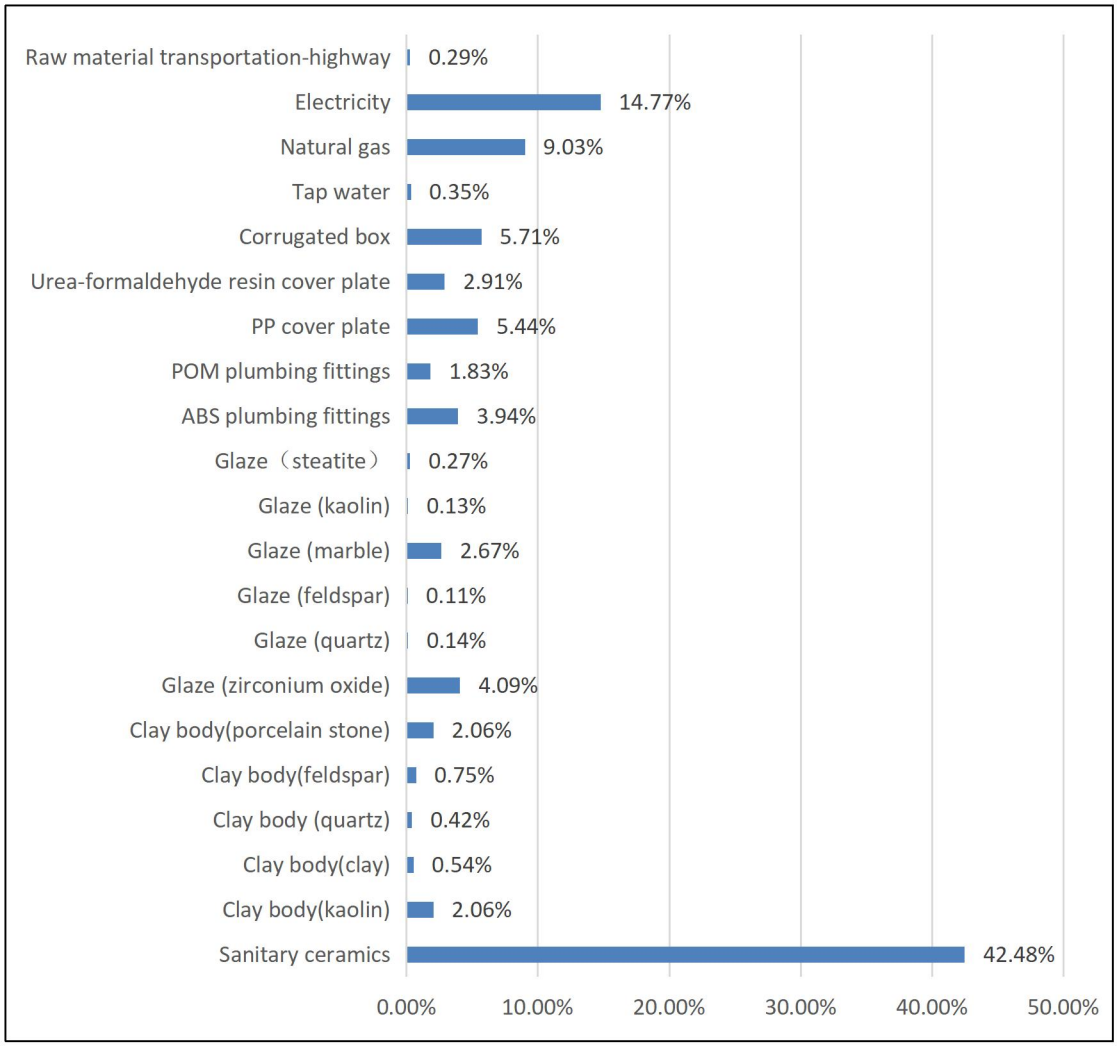


Figure 2-2 Contribution percentages of product processes to carbon footprint

The product life cycle stages are classified according to the stages of raw material production, energy production, transportation and product production respectively. The result is shown in Figure 2-3

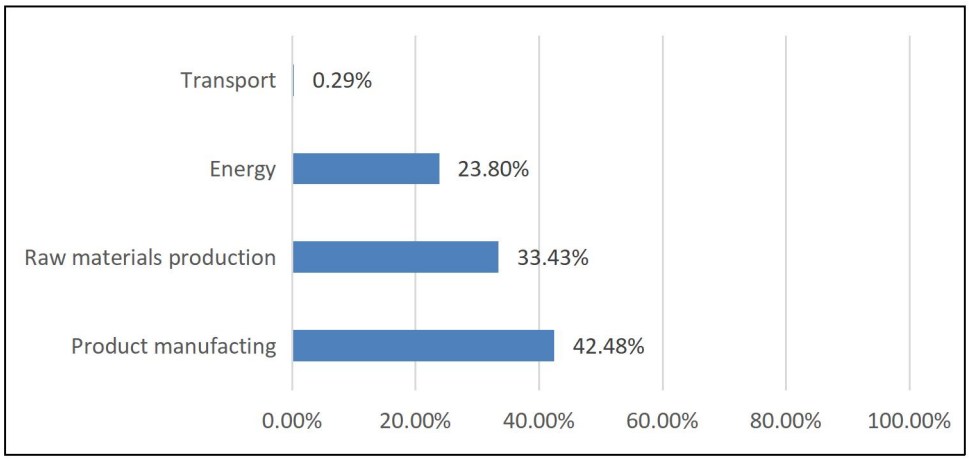


Figure 2-3 The proportion of carbon footprint contributions of the product during each stage of its life cycle

2.1.3.3 Comparability

This report is used to evaluate the greenhouse gas environmental impact of the product manufacturing process, released publicly, and does not act as a comparison judgment.

Appendix A: On-site Data Acquisition Form

表 1 现场数据采集表

（不公开）

企业信息	企业名称	潮州市麦禾卫浴有限公司		
	企业地址	潮州市潮安区凤塘镇英凤村前面路南侧 7 号之一厂房		
	统一社会信用代码	91445100MAC4A6QC7W	企业性质	民营企业
	企业法定代表人	邱楚桂	企业联系人	陈纯薇
	联系人电话	13828369890	电子邮件	mito-sale1@mito-cn.com
	产品名称/规格型号	陶瓷马桶/陶瓷洗手盆 吸水率：0.5%以下	产量	4800 吨
	生产线规模/设计产能	50 条生产线 2 条自动流水线/产能 600 吨		
	数据统计周期	2024.01~2024.12		

	种类/材质成分	消耗量	单位	详细情况说明
原材料消耗	泥料（高岭土）	650	吨	取得方式：采购 运输方式：陆运 运输距离：15 km
	泥料（粘土）	3250	吨	取得方式：采购 运输方式：陆运 运输距离 15 km
	泥料（石英）	650	吨	取得方式：采购 运输方式：陆运 运输距离 15 km
	泥料（长石）	1300	吨	取得方式：采购 运输方式：陆运 运输距离 15 km
	泥料（瓷石）	650	吨	取得方式：采购 运输方式：陆运 运输距离 15 km
	釉料（氧化锆）	65	吨	取得方式：采购 运输方式：陆运 运输距离：5 km
	釉料（石英）	214.5	吨	取得方式：采购 运输方式：陆运 运输距离：5 km
	釉料（长石）	195	吨	取得方式：采购 运输方式：陆运 运输距离：5 km
	釉料（大理）	100.7	吨	取得方式：采购 运输方式：陆运 运输距离：5 km
	釉料（高岭土）	42.3	吨	取得方式：采购 运输方式：陆运 运输距离：5 km

	釉料（滑石）		32.5	吨	取得方式：采购 运输方式：陆运 运输距离：5 km	
	水		26400	m^3	自来水	
配件消耗	塑料水件（ABS+POM 水阀）		ABS	54t	取得方式：外购 产地：潮州市 运输方式：公路 运输距离：15 km	
			POM	36t	取得方式：外购 运输方式：公路 运输距离：5 km	
	塑料盖板（PP/脲醛树脂）		PP	152t	取得方式：外购 产地：潮州市 运输方式：公路 运输距离：5 km	
			UF	84t	取得方式：外购 产地：xx 市 xx 区 运输方式：公路 运输距离：5 km	
包装材料	包装箱/瓦楞纸		纸箱	285t	取得方式：外购 产地：潮州市 运输方式：公路 运输距离：5 km	
能源消耗	种类		消耗量	单位	详细情况说明	
	天然气		105 万	立方	取得方式：外购 运输距离：20 km	
	电力		138 万	kWh	包含生产、办公用电	
特征污染物	种类		单位	数据来源	详细情况说明	
	大气污染物	颗粒物	0.100989	t	环保税核算表	/
		二氧化硫	0.106097	t	环保税核算表	/
		氮氧化物	1.891133	t	环保税核算表	/
		硫酸雾	0	t	环保税核算表	/
		铬酸雾	0	t	环保税核算表	/
		挥发性有机物	0	t	环保税核算表	/
		硫化氢	0	t	环保税核算表	/
		非甲烷总烃	0	t	环保税核算表	/
		氯化氢	0	t	环保税核算表	/
		铅及化合物	0	t	环保税核算表	/
	二氧化碳		/	t	/	/
	水污染物	COD	14	t	监测报告	/
		BOD5	3.5	t	监测报告	/
		SS	0	t	监测报告	/
		氨氮	0192	t	监测报告	/
		总氮	0	t	监测报告	/
		总磷	0.03	t	监测报告	/

		溶解性总固体	0	t	监测报告	/
		石油类	0	t	监测报告	/
		动植物油	0	t	监测报告	/
		总铜	0.15	t	监测报告	/

Product Carbon Footprint Certificate

Certificate number: **BMT-CFP-2025-059**

Declaration Owner:	**Chaozhou MITO Sanitary Ware Co.,Ltd** No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City
Manufacture:	**Chaozhou MITO Sanitary Ware Co.,Ltd** No. 7, south of Qianqian Road, Yingfeng Village, Fengtang Town, Chao'an District, Chaozhou City
Standards:	GB/T 24067 Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification PAS 2050 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services T/CBMF 284 Greenhouse gases-Quantification methods and requirements for carbon footprint of products-Architecture and sanitary ceramics
Declared Product:	Sanitary ceramics
Specification and Model:	Ceramic toilets, Ceramic washbasins
Functional Unit:	1t Sanitary ceramics（water absorption E≤0.5%）

The proportion of carbon footprint of products in each stage (Provided in Annex)

Issue date: May 29th, 2025 **Valid to:**May 28th , 2028

The annual validity of this certificate is maintained under the follow up inspection of the certificate authority.

Issued by:

Name of Certificate Authority (seal):
Beijing Building Materials Testing Academy Co., Ltd.

Beijing Building Materials Testing Academy Co., Ltd.
No.69, Jinding North Road, Shijingshan District, Beijing, P.R.China
www.bmtbj.cn

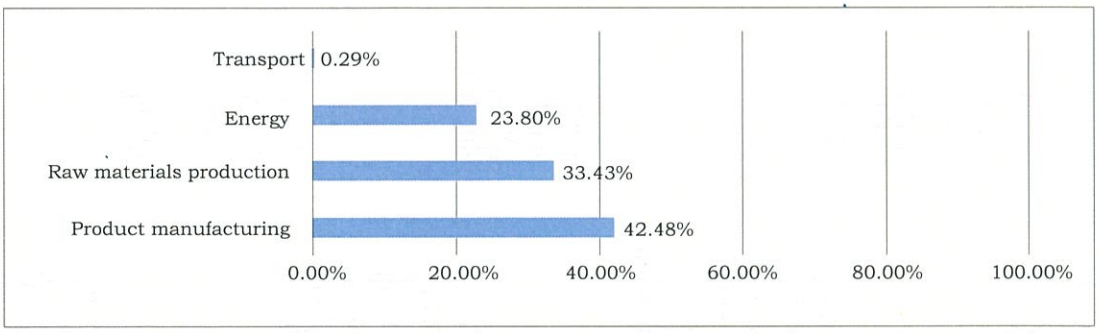
Product Carbon Footprint Certificate

Annex

Certificatenumber: **BMT-CFP-2025-059**

System Boundary:	From cradle to gate (incl. stages of raw materials production, transport, product manufacturing)
Data Boundary:	From 2024.1 to 2024.12
Carbon Footprint Emission:	1388 kg CO_2 eq

The proportion of products in each stage



Note:This annex is valid only when used together with the certificate.

Issue date: May 29th, 2025

Valid to: May 29th , 2028

Issued by:

Name of Certificate Authority (seal):
Beijing Building Materials Testing Academy Co., Ltd.

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