Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Damixa Iris Kitchen Mixers

from

FM Mattsson Denmark ApS

This EPD covers multiple products, based on worst-case results
The list of included products is presented on page 15 of this EPD document

Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Type of EPD:	EPD of multiple products from a company
EPD registration number:	EPD-IES-0025372:001
Version date:	2025-11-06
Validity date:	2030-11-05
	An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com

GENERAL INFORMATION

Programme Information	
Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
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Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): *Construction products, PCR 2019:14 version 2.0.1 published on 2025.06.05 and valid until 2030-04-07*
PCR review was conducted by: *The Technical Committee of the International EPD System. A full list of members is available on www.environdec.com. Review chair: Rob Rouwette (chair), Noa Meron (cochair). The review panel may be contacted via support@environdec.com*

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ **Individual EPD verification without a pre-verified LCA/EPD tool** Third-party verifier: *Anna Pantze, Tyréns Sverige AB* Approved by: International EPD System
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☒ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison.
For further information about comparability, see EN 15804 and ISO 14025.

INFORMATION ABOUT EPD OWNER

Owner of the EPD:	FM Mattsson Denmark ApS
Address:	Hvidkærvej 48, 5250 Odense SV, Denmark
Contact:	Phone: +45 88330034 Mail: danmark@fmmattssongroup.com Web: www.damixa.dk

Address and contact information of the LCA practitioner commissioned by the EPD owner:
Uniben Tettey
Rise - Research Institute of Sweden
Argongatan 30, 431 22 Mölndal, Box 104, Sweden

Description of the organisation:
Damixa is a Danish design and engineering company, and our mission is to create timeless design combined with practical features and good workmanship.
In 2014, Damixa became a part of the Swedish FM Mattsson Group, who is market leading in mixers and shower systems in the Nordic region.
FM Mattsson Group conducts the sale, manufacturing and product development of water mixers and related products under the established brands of FM Mattsson, Mora, Damixa, Hotbath, Aqualla and Adamsez.
The group's vision is to be the customer's first choice in the bathroom, kitchen and beyond.
In 2022 the business generated sales of more than 1.9 billion SEK from its companies in Sweden, Norway, Denmark, Finland, Benelux, UK, Germany and Italy and had 559 employees.

FM Mattsson Group is listed on Nasdaq Stockholm.

Product-related or management system-related certifications:
Designation according to EN817

PRODUCT INFORMATION

Product name: Damixa Iris Kitchen Mixers

Product identification: This EPD covers the product group - Damixa Iris Kitchen Mixers. The EPD is based on the worst-case approach, where results per kg product for the worst-case within the product group are declared. The complete list of products covered by the EPD is presented on page 15 of this EPD document.

UN CPC code: 42911 – Sinks, washbasins, baths and other sanitary ware and parts thereof, of iron, steel, copper, and aluminum.

Product description:
Damixa Kitchen Mixers are one-handle single lever mixers for installation in kitchen sinks. The mixers are mechanically operated to mix hot and cold water as well as regulate the water flow. Damixa kitchen mixers include built-in features such as Eco-save for limitation of water flow, coin-slot aerators for easy replacement or cleaning, cold-start, and anti-scalding functions.

Name and location of production site(s):
FM Mattsson Denmark ApS
Hvidkærvej 48
5250 Odense SV
Denmark

CONTENT DECLARATION

Product content	Mass, kg	Post-consumer recycled material*, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/product or declared unit
Brass	0.113	0	0	0
Zinc	0.390	0	0	0
Stainless steel	0.371	0	0	0
Aluminium	0.018	0	0	0
Copper	0.004	0	0	0
Nickel	0.003	0	0	0
Chromium	0.0001	0	0	0
Plastic	0.080	0	0	0
Rubber	0.008	0	0	0
Ceramic	0.013	0	0	0
TOTAL	1.000	0	0	0

* The products contain varying shares of recycled material but information about the share of post-consumer material was not available so they have been modelled with primary material.

Packaging materials	Mass, kg	Mass-% (versus the product)	Biogenic material, kg C/product or declared unit
Corrugated board	0.103	10.3	0.052
Paper	0.012	1.2	0.006
TOTAL	0.115	11.5	0.058

1 kg biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kg of CO_2.

Hazardous substances from the candidate list of SVHC	EC No.	CAS No.	Mass-% per product or declared unit
Lead	231-100-4	7439-92-1	0.13**

** The lead content varies between 0.01 – 0.13% for the included products.

LCA INFORMATION

Declared unit: 1 kg of Damixa Iris Kitchen Mixers

Reference service life[1]: 16 years, the reference service life is assumed to be the same as the estimated service life of the studied products.

Time representativeness: The data used for the LCA calculation covers bill-of-materials as well as operations at FM Mattsson Denmark ApS for the year 2024.

Allocation: Allocation is by mass and based on data for operations at FM Mattsson Denmark ApS for the year 2024.

Cut-off criteria: The cut-off is according to EN 15804:2012+A2:2019 and PCR 2019:14 and shall cover a minimum of 99% of the total mass and energy inflows per unit process and 95% of the total mass and energy inflows per life cycle stage. Additionally, PCR 2019:14 states that at least 95% of the environmental impact per aggregated module shall be included. All materials and energy used to manufacture the kitchen mixers are included. Impacts from infrastructure and/or capital goods from the manufacturing site are excluded as they are assumed to be negligible. Some Ecoinvent datasets used for upstream processes include infrastructure.

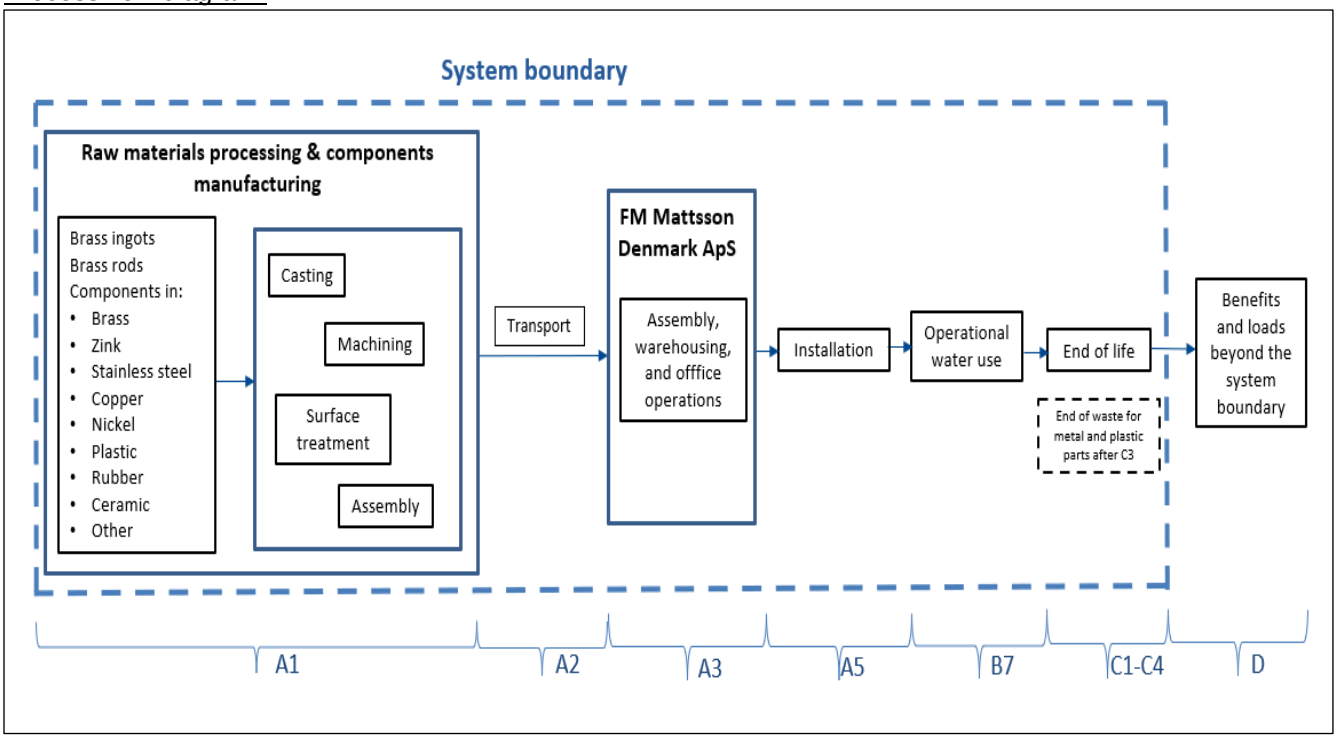
Geographical scope: The processes in modules A1 and A2 have been modelled for China; module A3 has been modelled for Denmark while the use phase (module B7) and end-of-life (module C1-C4) as well as module D have been modelled for the European region.

Database(s) and LCA software used: Ecoinvent 3.10 with the system model for “allocation, cut-off by classification” and SimaPro 10.2.0.1.

Description of system boundaries: Cradle to gate (A1-A3) with options, i.e., also construction installation A5 and operational water use module B7, waste management modules C1–C4 and beyond end-of-life module D.

[1] The reference service life is defined based on Cordella M. et al. (2014).

Process flow diagram:



More information:

Supplier specific electricity mixes and corresponding GWP impact: China, southwest region – Main supplier, (90% grid electricity and 10% solar power): 329 g CO_2/kWh; China, southwest region – other suppliers: 357 g CO_2/kWh; China – unknown location: 945 g CO_2/kWh; Germany: 456 g CO2/kWh.

Electricity used in module A3: Purchased electricity for operations at FM Mattsson Denmark ApS is 100% renewable based, from wind power with a GWP impact of 19.1 g CO2-eq/kWh.

Information about scenarios and additional technical information: Information about the scenario for operational water use for this product is provided under “Additional Information” below.

Data quality summary according to EN 15491: Modelling of all product components are based on production bill-of-material for the year 2024. Primary data for the studied products originate from FM Mattsson Denmark ApS as well as their suppliers, while secondary data is based on the Ecoinvent database version 3.10. Overall, the data quality of the study is assessed to be good and representative of the studied products.

LCA MODULES	
A1 Raw material supply: This module relates to raw material extraction and processing, processing of secondary material input (e.g. recycling processes).	**C1 De-construction:** This module relates to the dismantling of the products at the end-of-life. It is assumed that the dismantling is done manually and the related impacts are assumed to be negligible.
A2 Transportation: This module relates to transport from raw material extraction and processing, and component manufacturing to suppliers and FM Mattsson Denmark ApS.	**C2 Waste Transport:** This module relates to the transport of the dismantled product to final waste disposal. Default values for transport distances based on PCR 2019:14 v.2.0.1 were used. The transport is modelled with the ecoinvent 3.10 dataset “Transport, freight, lorry 16-32 metric ton, EURO5 {RER}| transport, freight, lorry 16-32 metric ton, EURO5 | Cut-off, U”.
A3 manufacturing: This module covers operational activities at FM Mattsson Denmark ApS. The processes cover assembly, warehousing and office operations at FM Mattsson Denmark ApS.	**C3 Waste processing:** This module covers impacts related to sorting and recycling processes for the relevant material components of the kitchen mixers. It is assumed that the metal parts are fully recovered for recycling with 95% of the brass and 85% of the steel and other non-brass metals in the products being actually recycled. The plastics and rubber components are assumed to be incinerated with energy recovery.
A5 Construction installation: This module covers transport of product packaging wastes to waste management and their incineration. The plastic packaging waste are assumed to be 100% incinerated with energy recovery. 26% of the cardboard and paper packaging waste are also assumed to be incinerated with energy recovery while the remaining 74% is recycled (EPRC).	**C4 Waste disposal:** This module relates to waste disposal processes such as landfilling. The remaining 5% of the brass and 15% of the steel and other non-brass metals are accounted for as incineration waste in this module.
B7 Operational: This module covers the production, heating and wastewater treatment of tap water use over the reference service life of the studied products. Further details on the scenario for operational water use are given in “Additional Information” below.	**D Benefits and loads beyond system boundary:** This module covers benefits and loads associated with recovery/recycling beyond the defined system boundary for the kitchen mixer. This includes benefits from recycling and waste incineration.

Modules declared, geographical scope, share of primary data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Distribution/ installation stage		Use stage							End-of-life stage				Beyond product life cycle
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	X	X	X	ND	X	ND	ND	ND	ND	ND	ND	X	X	X	X	X	X
Geography	Global /EU	Global /EU	DK		EU							EU	EU	EU	EU	EU	EU
Share of primary data	6.6% for GWP-GHG in A1-A3					-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	4% for GWP-GHG in A1-A3					-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%, all A3 in one site					-	-	-	-	-	-	-	-	-	-	-	-

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Raw materials and component manufacturing for product and packaging	Collected data	Ecoinvent v3.10	2024	secondary data	0%
Transport of raw materials, A2	Collected data Database	Ecoinvent v3.10	2024	Primary data	3.6%
Energy use	Collected data Database	Ecoinvent v3.10	2024	Primary data	3.0%
Other processes	Databases	Ecoinvent v3.10	2023	Secondary data	0%
Total share of primary data, of GWP-GHG results for A1-A3					6.6%

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

ENVIRONMENTAL PERFORMANCE

LCA results of the product(s) - main environmental performance results

Mandatory impact category indicators according to EN 15804

Results per kg kitchen mixer									
Indicator	**Unit**	**A1-A3**	**A5**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-fossil	kg CO_2 eq.	6.66E+00	1.27E-02	1.78E+02	0.00E+00	1.63E-02	2.80E-01	2.63E-03	-3.02E+00
GWP-biogenic	kg CO_2 eq.	-1.49E-02	3.24E-01	2.06E+01	0.00E+00	1.12E-05	2.97E-02	3.02E-06	1.60E-03
GWP-luluc	kg CO_2 eq.	8.91E-03	3.72E-06	1.84E-01	0.00E+00	5.34E-06	4.02E-05	1.12E-06	-6.79E-03
GWP-total	kg CO_2 eq.	6.65E+00	3.37E-01	1.99E+02	0.00E+00	1.63E-02	3.10E-01	2.63E-03	-3.03E+00
ODP	kg CFC 11 eq.	1.50E-06	1.66E-10	4.11E-06	0.00E+00	3.25E-10	7.97E-10	5.38E-11	-4.10E-08
AP	mol H^+ eq.	9.21E-02	5.80E-05	6.45E-01	0.00E+00	5.11E-05	2.69E-04	1.47E-05	-3.23E-02
EP-freshwater	kg P eq.	5.16E-04	1.40E-07	5.12E-02	0.00E+00	1.26E-07	1.54E-06	3.86E-08	-2.38E-04
EP-marine	kg N eq.	1.08E-02	2.25E-05	8.17E-01	0.00E+00	1.70E-05	9.70E-05	5.46E-06	-4.64E-03
EP-terrestrial	mol N eq.	1.23E-01	2.38E-04	1.25E+00	0.00E+00	1.87E-04	9.36E-04	6.02E-05	-5.37E-02
POCP	kg NMVOC eq.	3.67E-02	8.63E-05	5.70E-01	0.00E+00	8.01E-05	3.08E-04	2.08E-05	-1.65E-02
ADP-minerals&metals*	kg Sb eq.	1.29E-03	4.71E-08	3.07E-04	0.00E+00	5.22E-08	5.46E-07	7.36E-09	-7.90E-04
ADP-fossil*	MJ	8.18E+01	1.37E-01	2.79E+03	0.00E+00	2.29E-01	6.67E-01	4.27E-02	-3.86E+01
WDP*	m^3	3.41E+00	7.83E-04	1.75E+03	0.00E+00	9.40E-04	8.03E-03	2.55E-04	-1.65E+00
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption								

** Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.*

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3).

Biogenic carbon in packaging is balanced in A1–A3.

Additional mandatory and voluntary impact category indicators

Results per kg kitchen mixer									
Indicator	**Unit**	**A1-A3**	**A5**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[2]	kg CO_2 eq.	6.79E+00	1.41E-02	1.81E+02	0.00E+00	1.63E-02	2.94E-01	2.63E-03	-1.41E+00
PM	Disease incidence	5.22E-07	1.11E-09	9.44E-06	0.00E+00	1.28E-09	4.27E-09	4.60E-10	-2.22E-07
IRP[3]	kBq U235 eq.	2.17E-01	1.40E-04	1.03E+01	0.00E+00	1.05E-04	1.25E-03	1.95E-05	-1.57E-01
ETP-fw[3]	CTUe	2.91E+02	1.34E-01	2.22E+03	0.00E+00	6.16E-02	9.98E-01	4.81E-02	-1.87E+02
HTP-c[3]	CTUh	1.64E-07	9.66E-11	6.20E-07	0.00E+00	1.14E-10	6.31E-10	4.33E-11	-2.17E-08
HTP-nc[3]	CTUh	6.74E-07	1.94E-10	4.20E-06	0.00E+00	1.43E-10	1.39E-09	2.28E-11	-2.91E-07
Land use/ SQP[3]	Pt	5.41E+01	4.85E-02	1.41E+03	0.00E+00	1.36E-01	1.16E+00	4.98E-02	-2.46E+01

[3] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[4] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

[2] This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO_2 is set to zero.

Resource use indicators

Results per kg kitchen mixer									
Indicator	**Unit**	**A1-A3**	**A5**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	1.83E+01	4.81E-03	4.29E+02	0.00E+00	3.76E-03	5.00E-02	8.12E-04	-3.74E+00
PERM	MJ	2.27E+00	-1.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.06E+01	-1.83E+00	4.29E+02	0.00E+00	3.76E-03	5.00E-02	8.12E-04	-3.74E+00
PENRE	MJ	8.18E+01	1.37E-01	2.22E+03	0.00E+00	2.29E-01	6.67E-01	4.27E-02	-1.81E+01
PENRM	MJ	2.62E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.57E+00	0.00E+00	0.00E+00
PENRT	MJ	8.44E+01	1.37E-01	2.22E+03	0.00E+00	2.29E-01	-1.90E+00	4.27E-02	-1.81E+01
SM	kg	4.29E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	2.24E-01	8.66E-05	4.73E+01	0.00E+00	5.75E-04	2.86E-05	0.00E+00	0.00E+00
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water								

Waste indicators

Results per kg kitchen mixer								
Indicator	**Unit**	**A1-A3**	**A5**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Non-hazardous waste disposed	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radioactive waste disposed	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Output flow indicators

Results per kg kitchen mixer									
Indicator	**Unit**	**A1-A3**	**A5**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	2.04E-05	8.51E-02	0.00E+00	0.00E+00	0.00E+00	8.99E-01	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, electricity	MJ	2.28E-02	5.95E-02	0.00E+00	0.00E+00	0.00E+00	3.34E-01	0.00E+00	0.00E+00
Exported energy, thermal	MJ	4.49E-02	1.19E-01	0.00E+00	0.00E+00	0.00E+00	6.51E-01	0.00E+00	0.00E+00

Additional LCA results (other environmental performance results) of the product(s)

Results per kg kitchen mixer											
Indicator	**Unit**	**100% recycling scenario**					**100% incineration scenario**				
		A5	**C2**	**C3**	**C4**	**D**	**A5**	**C2**	**C3**	**C4**	**D**
GWP-fossil	kg CO_2 eq.	1.13E-02	1.55E-02	6.55E-02	2.63E-03	-3.12E+00	1.67E-02	2.52E-02	2.80E-01	1.66E-02	-1.31E-01
GWP-biogenic	kg CO_2 eq.	3.48E-03	1.06E-05	2.96E-02	3.02E-06	-1.81E-02	2.29E-01	1.72E-05	2.96E-02	1.77E-05	-1.82E-03
GWP-luluc	kg CO_2 eq.	3.42E-06	5.06E-06	3.95E-05	1.12E-06	-7.04E-03	4.57E-06	8.22E-06	4.02E-05	7.27E-06	-1.72E-04
GWP-total	kg CO_2 eq.	1.48E-02	1.55E-02	9.51E-02	2.64E-03	-3.14E+00	2.46E-01	2.52E-02	3.10E-01	1.66E-02	-1.33E-01
ODP	kg CFC 11 eq.	1.45E-10	3.08E-10	7.29E-10	5.38E-11	-4.95E-08	2.26E-10	5.00E-10	7.97E-10	3.35E-10	-1.43E-09
AP	mol H^+ eq.	4.74E-05	4.84E-05	2.25E-04	1.47E-05	-3.23E-02	8.82E-05	7.87E-05	2.69E-04	9.18E-05	-8.68E-04
EP-freshwater	kg P eq.	1.26E-07	1.19E-07	1.49E-06	3.86E-08	-2.37E-04	1.79E-07	1.94E-07	1.54E-06	2.43E-07	-8.88E-06
EP-marine	kg N eq.	1.78E-05	1.61E-05	7.58E-05	5.46E-06	-4.72E-03	3.57E-05	2.62E-05	9.70E-05	3.46E-05	-1.05E-04
EP-terrestrial	mol N eq.	1.90E-04	1.78E-04	7.18E-04	6.02E-05	-5.43E-02	3.76E-04	2.89E-04	9.36E-04	3.81E-04	-1.22E-03
POCP	kg NMVOC eq.	7.34E-05	7.59E-05	2.54E-04	2.08E-05	-1.74E-02	1.23E-04	1.23E-04	3.08E-04	1.31E-04	-3.88E-04
ADP-minerals&metals*	kg Sb eq.	4.40E-08	4.95E-08	5.37E-07	7.36E-09	-7.92E-04	5.57E-08	8.05E-08	5.46E-07	4.65E-08	-1.28E-07
ADP-fossil*	MJ	1.25E-01	2.17E-01	6.35E-01	4.27E-02	-4.35E+01	1.71E-01	3.53E-01	6.67E-01	2.69E-01	-1.98E+00
WDP*	m^3	5.73E-04	8.91E-04	7.26E-03	2.55E-04	-1.76E+00	1.38E-03	1.45E-03	8.03E-03	7.28E-03	-1.88E-02
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption										

** Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.*

This EPD covers the group of products – Damixa Iris Kitchen Mixers and is based on worst case results. The list of included products are given below:

Series	Article number	Description	Weight (g)	Flow rate (l/min)
Iris	91070	Kitchen mixer	1188	6.0
Iris	91071	Kitchen Mixer w. DW	1452	6.0

ADDITIONAL ENVIRONMENTAL INFORMATION

Overall, the results for the potential environmental impacts over the entire life cycle of the kitchen mixers show that the use phase (B7) related to operational water use is by far the most significant contributor. It illustrates the importance of the use phase in reducing environmental impacts associated with sanitary fitting products. Design of energy-efficient products, choice of renewable energy sources during the use phase as well as appropriate user behaviour can play a significant role in lowering the use phase impacts. Studies have shown that up to 40% energy savings can be realized through energy-efficient taps and showers (Dodoo et al. 2017; Folkeson et al., 2017).

Operational water use scenario

For this product, the scenario for operational water use has been modelled based on average performance parameters for kitchen mixers derived from a study by Cordella M. et al. (2014), on different sanitary products within the EU and information from the European Water Label (EWL, 2022). The parameters used to estimate the water use for the kitchen mixers as well as the energy mix for water heating are given in the tables below. Based on the given parameters and assumptions, the annual average water consumption for this product is 2 555 liters per person. About 40% of this is assumed to be hot water use and the corresponding annual energy use to heat the water is about 29 kWh. Note that the corresponding climate impact for module B7, 199 kg CO2-eq is based on an assumed flow rate of 1 liter/minute for 16 years of use by one person and also includes water production and distribution, as well as waste water treatment. In order to estimate the climate impact for B7 for a specific kitchen mixer, the climate impact result of 199 kg CO2-eq should be multiplied by its actual nominal flow rate and further information on the nominal flow rates of the listed kitchen mixers are given on page 15 and also available at www.damixa.dk

Parameters used to model the operational water use for the kitchen mixers		
Parameter	**Value**	**Unit**
Reference flow	1	l/minute
Use cycles	7	Per person/day
Duration of use cycle	1	Minute
Share of hot water use	40	%
Cold water inlet temperature	15	ºC
Outlet mixed water temperature	45	ºC
Specific heat capacity of water	4.18	kJ/(kg·K)
Density of water	0.981	kg/l

The energy mix for the operational water use scenario is modelled based on data for different fuel mixes for water heating in EU households for 2023 (Eurostat, 2025). In 2023, 15% of the total final energy use in the EU was for water heating in the residential sector.

Energy mix for operational water heating modelling	
Energy source	**Share, %**
Solid fossil fuels and peat	1.2
Natural gas	39.4
Oil and petroleum products	10.3
Renewables and biofuels	16.2
Electricity	18.4
Heat	1.4
Total	100
Corresponding GWP	283 g CO2-eq/kWh

ABBREVIATIONS

Abbreviation	Definition
CEN	European Committee for Standardization
CPC	Central product classification
EN	European Norm (Standard)
EF	Environmental Footprint
EPD	Environmental Product Declaration
GPI	General Programme Instructions
ISO	International Organization for Standardization
LCA	Life-Cycle Assessment
ND	Not Declared
PCR	Product Category Rules
SVHC	Substances of Very High Concern

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VERSION HISTORY

Original Version of the EPD, 2025-11-06

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