

iBVD

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3

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Uppgiftslämnaren reserverar sig för eventuella fel i produktinformationen eller felaktigt registrerade uppgifter och förbehåller sig rätten att korrigera och/eller komplettera produktinformation utan föregående avisering

## 1 GRUNDDATA

### Varubeskrivning

Blyfri, Energiklass A, sparar vatten och energi  
Soft move, keramiskt paket med mjuk och precis manövrering  
Cold-start, ger kallvatten vid spak rakt fram.

### Övriga upplysningar

Art.Nr:  
GB412160470 / RSK: 8278510  
GB41216047 060 / RSK: 8278505  
GB412160450 / RSK: 8278516  
RISE Energiklassningscertifikat: C900316

### Klassificeringar

<b>ETIM</b> ›	-EC011328 - Tvättställsblandare
<b>BK04</b> ›	-20107 - Sanitetsarmatur
<b>BSAB</b> ›	-PVB.23 - Tvättställsblandare och bidéblandare
<b>UNSPSC</b> ›	-30181700

### Leverantörsuppgifter

**Företagsnamn**  
Villeroy & Boch Gustavsberg AB

**Organisationsnummer**  
5564419918

**Adress**  
Odelbergs väg 11

**Hemsida**  
www.gustavsberg.se

### Miljökontaktperson

**Namn**  
Markus Barkestedt

**Telefon**  
0857039227

**E-post**  
markus.barkestedt@gustavsberg.com

## Företagets certifiering

- ISO 9000
- ISO 14000
- ISO 45001, ISO 50001, EMAS

## Policys och riktlinjer

Kemisk produkt	Nej
Omfattas varan av RoHS-direktivet	Nej
Varans vikt	1,1 - 1,36 kg

## Vara / Delkomponenter

Koncentrationen har beräknats på hela varan

Ingående material /komponenter	Vikt-% i komponent	CAS-nr (alt legering)	EG-nr (alt legering)	Vikt % i produkt	Kommentar
Ämnesspecificerad mässinglegering		Övrigt, metaller		64,46 - 71,49%	Mässing CW724R* (CuZn21Si3P) Pb ≤ 0,07% , Ni ≤ 0,01% (*=4MS B,C)
Zamak 3 zinklegering, (Pb 0.005%, Cd 0.004%, Sn 0.003%)		Övrigt, metaller		9,22 - 11,36%	Ej vattenberörda delar
Rostfritt stål EN 1.4310, 6-9,5 % Ni, Bedömning på legeringsnivå		12597-68-1	603-108-1	3,96 - 4,98%	
Mässing CW511L* (CuZn38As), Pb ≤ 0,2%, Ni ≤ 0,3%, As ≤ 0,15% (*=4MS B,C)		Övrigt, metaller		2,95 - 3,64%	4MS mässing som innehåller >0,1% bly, CAS nr. 7439-92-1 och som finns upptaget på den europeiska kemikaliemyndighetens (ECHA) kandidatförteckning över SVHCämnen.
Glasfiberarmerad polyamid PA12		Övrigt, polymer		2,58 - 3,18%	
Mässing CW510L* (CuZn42) Pb ≤ 0,1%, Ni* ≤ 0,3% (*=4MS B,C) [ CAS-nr: Övrigt, metaller   Legerings-nr: CW510L* ]		Övrigt, metaller		1,92 - 2,36%	Mässing CW510L* (CuZn42) Pb ≤ 0,1%, Ni ≤ 0,3% (=4MS B,C)

Stål olegerat 1.0308 E235		Övrigt, metaller		1,7 - 2,09%	Skruv för infästning av produkten Ytbehandling El-förzinkad
Aluminiumtrioxid, Aluminiumoxid		1344-28-1	215-691-6	1,47 - 1,81%	Keramiska tätningsskivor
PEX tvärbunden polyeten		Övrigt, polymer		1,33 - 1,64%	
Polyamide 6, PA6, Grilon, Nylon 6, Caprolactam polymer, Poly[[imino(1-oxo-1,6-hexanediy)]]		25038-54-4	Saknas	1,32 - 1,63%	
POM-plast		9001-81-7		1,3 - 1,6%	
ABS plast		9003-56-9		0,37 - 0,45%	
EPDM		Övrigt, polymer		0,34 - 0,42%	
Termoplastisk Elastomer, TPE, ospecificerad		Övrigt, polymer		0,18 - 0,23%	
nitrile-butadiene rubber, Perbunan, NBR-gummi, Acrylonitrile-butadiene copolymer, 2-Propenenitrile, polymer with 1,3-butadiene		9003-18-3		0,05 - 0,06%	
Nickel		7440-02-0	231-111-4	0,1 - 0,4%	Ytbehandling av produkten.
Krom (metallisk)		7440-47-3	231-157-5	0,01 - 0,03%	Ytbehandling av produkten.

**Del av materialinnehållet som är deklarerat**

100%

### Särskilt farliga ämnen

Varan innehåller INTE några ämnen med särskilt farliga egenskaper (Substances of very high concern, SVHC-ämnen) som finns med på kandidatförteckningen i en koncentration som överstiger 0,1 vikts-%

### Utgåva av kandidatförteckningen som har använts

2022-01-17

### Nanomaterial

**Innehåller produkten tillsatt nanomaterial, som är medvetet tillsatta för att uppnå en viss funktion?:** Nej

### Tillsatt högflourerade ämnen (PFAS)

**Innehåller produkten tillsatt högflourerade ämnen (PFAS), som är aktivt tillsatta för att uppnå en specifik funktion?:** Nej

### Övrigt

Ämnen är redovisade ned till 0,01% viktprocent enligt iBVDs redovisningskrav. Eventuell avvikelser från redovisningskraven redovisas nedan

## Återvunnet material

Innehåller varan återvunnet material: Ja

Specifikation av vilka material och andel som utgörs av den totala varans vikt

1. Återvunnet material
2. Andel (%) av totala varans vikt
3. Andel (%) av det återvunna materialet vilket **inte** har passerat konsumentledet
4. Andel (%) av det återvunna materialet vilket har passerat konsumentledet

1	2	3	4
Mässing	77,5 %	0 %	95 %
Rostfritt stål	4,9 %	20 %	80 %
Zink	11,36 %	70 %	30 %

## Träråvara

Träråvara ingår i varan: Nej

Finns en miljövarudeklaration framtagen enligt EN15804 eller ISO14025 för varan

Ja

Finns annan miljövarudeklaration

Nej

**Om miljövarudeklaration eller annan livscykelanalys saknas, beskriv hur miljöpåverkan av varan beaktas ur ett livscykelperspektiv**

Vi tillhandahåller reserverar till våra produkter i minst 10år efter att produkten utgått ur sortimentet. det innebär att livslängden på våra produkter är minst 25år.

Dessutom uppfyller dessa produkter energiklass A vilket hjälper till att minska användandet av varmt och kallt vatten.

Detta påverkar i sin tur utsläppen av CO2 på ett positivt sätt då man inte behöver använda lika mycket resurser för att värma den mängd varmvatten som används i lägre klassade produkter (C-D osv.)

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**DISTRIBUTION****Beskrivning av emballagehantering för distribution av varan**

Produkten levereras i förpackning tillverkad av återvunnen wellpapp. Förpackningen skall återvinnas och lämnas till wellpapp återvinning. Företaget är anslutet till FTI AB.

7

**BYGGSCKEDET**

Ställer varan särskilda krav vid lagring?

Nej

Ställer varan särskilda krav på omgivande byggvaror?

Nej

8

**BRUKSSKEDET**

Finns skötselanvisningar/skötselråd?

Ja

Finns en energimärkning enligt energimärkningsdirektivet (2017/1369/EU) för varan?

Ej relevant

9

**RIVNING**

Kräver varan särskilda åtgärder för skydd av hälsa och miljö vid rivning/demontering?

Nej

10

**AVFALLSHANTERING**

Omfattas den levererade varan av förordningen (2014:1075) om producentansvar för elektriska och elektroniska produkter när den blir avfall?

Nej

Är återanvändning möjlig för hela eller delar av varan?

Ja

Ja vi tillhandahåller reservdelar till våra produkter, för ökad livslängd eller återbruk.

Är materialåtervinning möjlig för hela eller delar av varan?

Ja

Ja metallåtervinning av Mässing, Zink, Rostfritt stål och stål är möjlig. Dessa metaller bör materialåtervinnas.

**Är energiåtervinning möjlig för hela eller delar av varan?** Ja

Ja polymera material kan energi återvinnas genom förbränning i avsedd anläggning.

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**Har leverantören restriktioner och rekommendationer för återanvändning, material- eller energiåtervinning eller deponering?** Ja

Lämna varan på auktoriserad återvinnings central för

-Metallåtervinning av alla metalliska material

-Energiåtervinning av alla polymera material

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**När den levererade varan blir avfall, klassas den då som farligt avfall?** Nej

**Avfallskod (EWC) för den levererade varan** 170401

<b>RSK-nummer</b>	<b>Eget Artikel-nr</b>	<b>GTIN</b>
827 85 10	GB412160470	7393792235013
827 85 16	GB412160450	7393792235129
827 85 05	GB41216047060	7393792235020

**Produktdatablad**

**Prestandadeklaration**

**Säkerhetsblad**

**Miljövarudeklaration**                      EPD New Nautic washbasin mixers led free.pdf

**Skötselansvisning**

**Övriga bifogade dokument**

[-New Nautic\\_single-lever\\_mixers\\_1\\_2021\\_01\\_20\\_web.pdf](#)



# Environmental Product Declaration



In accordance with ISO 14025 and EN 15804:2012+A2:2019 for:

## ***New Nautic washbasin mixer GB412160470***

from

***Villeroy & Boch Gustavsberg AB***



Programme:	The International EPD® System, <a href="http://www.environdec.com">www.environdec.com</a>
Programme operator:	EPD International AB
EPD registration number:	S-P-05060
Publication date:	2021-12-13
Valid until:	2026-12-12

*An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at [www.environdec.com](http://www.environdec.com)*



## General information

### Programme information

<b>Programme:</b>	The International EPD® System
<b>Address:</b>	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
<b>Website:</b>	<a href="http://www.environdec.com">www.environdec.com</a>
<b>E-mail:</b>	<a href="mailto:info@environdec.com">info@environdec.com</a>

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product category rules (PCR) Construction Products 2019:14, Version 1.1 and EN 15804:2012 + A2:2019 Sustainability of Construction Works.
PCR review was conducted by: <i>The Technical Committee on the International EPD® System.</i> Contact via <a href="http://www.environdec.com">www.environdec.com</a> <a href="mailto:info@environdec.com">info@environdec.com</a>
Independent third-party verification of the declaration and data, according to ISO 14025:2006:  <input type="checkbox"/> EPD process certification <input checked="" type="checkbox"/> EPD verification
Third party verifier: <i>Mats Zackrisson, RISE Research Institutes of Sweden</i> Approved by: The International EPD® System
LCA report and EPD prepared by: AFRY, <a href="http://www.afry.com">www.afry.com</a>
Procedure for follow-up of data during EPD validity involves third party verifier:  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

EPDs within the same product category but from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804. For further information about comparability, see EN 15804 and ISO 14025.

## Company information

### Owner & Contact of the EPD:

Villeroy & Boch Gustavsberg AB  
Odelbergs väg 11  
134 40 Gustavsberg  
Tel: +46 8-570 391 00  
www.gustavsberg.se

### Description of the organisation:

Villeroy & Boch Gustavsberg's head office is situated on Värmdö, just outside Stockholm, Sweden, and we have production facilities in Gustavsberg and Vångårda as well. In addition to our production facilities in Sweden, we also have sales offices around the Nordic countries and in the Baltics. The company is a wholly owned subsidiary of the German Villeroy & Boch AG Group and thus belongs to one of the largest manufacturers of bathroom furnishing solutions in Europe.

### Product-related or management system-related certifications:

SS-EN ISO 9001:2015 – Quality Management System  
SS-EN ISO 14001:2015 – Environmental Management System  
SS-EN ISO 45001:2018 – Occupational Health and Safety Management Systems  
SS-EN ISO 50001 :2018 – Energy Management System  
EMAS, Eco Management and Audit Scheme – register, Site Vångårda

### Name and location of production site:

Villeroy & Boch Gustavsberg AB, Vångårda, Sweden

## Product information

### Product name:

Nautic washbasin mixer

### Product identification:

RSK number: 8278510  
Part number: GB412160470, GB41216047060 (60-pack)  
EAN number: 7393792235013

RSK number: 8278508  
Part number: GB412161470  
EAN number: 7393792234986

### With longer spout:

RSK number: 8278509  
Part number: GB41216047064  
EAN number: 7393792235006

### Product description:

New Nautic washbasin mixer is an Energy A classified product that helps saving energy and water during the usage phase. It has soft move technology for smooth and precise handling with cold-start, only cold water when the lever is in straight forward position.

### UN CPC code:

42911 - Sinks, wash-basins, baths and other sanitary ware and parts thereof, of iron, steel, copper or aluminum.

**LCA information**

Declared unit:

1 kg of brass mixer

Reference service life:

No RSL is declared. This EPD is based on a cradle-to-gate assessment

Time representativeness:

The LCA is based on production data from 2020 but is considered to be an average year of production.

Database(s) and LCA software used:

Ecoinvent 3.7.1 and SimaPro 9.2

Description of system boundaries:

Cradle to gate with modules C1–C4 and module D (A1–A3 + C + D).

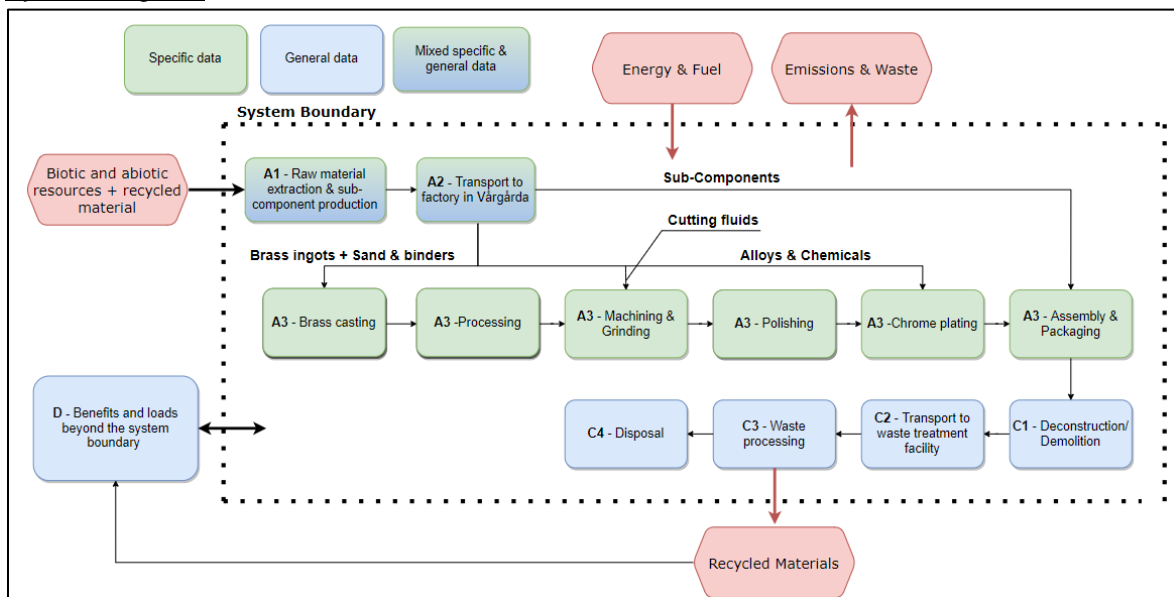
Data quality:

Raw material input, energy, water and chemical consumption from manufacturing and waste in manufacturing is primary data collected from Villeroy & Boch. A mix of specific and general data is used for extraction and refining of raw materials and components, and for transportation.

LCA practitioner:

AFRY Sweden, [www.afry.com](http://www.afry.com)

System diagram:



	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	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	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X

### A1: Raw Material

This stage includes raw material extraction, including melting and forming of brass. 50% of brass is produced from recycled metals. Also, production of raw materials for components as well as component manufacturing is included. Transportation of inputs to brass production and component manufacturing is included in this module.

### A2: Transport

This stage includes transportation of raw materials to production sites and of components to final site of assembly.

### A3: Manufacturing

This stage includes production of the brass housings for the faucets, surface treatment of the housings and assembly of the finished product. It also includes treatment of waste generated from the manufacturing processes up to the end-of-waste state. The manufacturing processes at Villeroy & Boch includes casting, machining, grinding, polishing and chrome plating. The electricity used in manufacturing is the residual electricity mix of the Swedish energy supplier Vattenfall and consists of 42% hydropower and 58% nuclear power. The climate impact of the electricity mix is 15.4 g CO2 eq./kWh.

### C1: Deconstruction

This stage includes impacts related to removing the mixers at product end-of-life. The environmental impacts generated during this phase are very low and therefore can be neglected.

### C2: Waste Transport

Includes the transportation of the discarded product to a waste treatment facility.

### C3: Waste Processing

This stage includes sorting and recycling processes. 95% of the brass in the product is assumed to be recycled.

### C4: Waste disposal

This stage includes waste disposal processes such as landfilling or incineration. Brass mixers are generally recycled at the end of their life. However, some of the non-brass metals, plastics and rubbers in the product are assumed to be landfilled or incinerated.

### D: Benefits and loads outside the system boundary

This stage includes benefits and burdens associated with recovery/recycling that affects previous or future life cycles. For this product it includes benefits from the recycling of brass.



## Content information

The main material in the washbasin mixer is lead-free brass (composition Cu 75-77%, Zn 19-22%, Si 2.7-3.5%, lead <0.1%). The amount of recycled metals in brass is ca. 50%. Zinc is used in the lever and other materials are used in different components.

Material	Weight per product, g	Weight per kg product, g
Lead-free brass	786.3	707.3
Zinc	125	112.4
Stainless steel	53.7	48.3
Polyamide	52.9	47.6
Steel	23	20.7
Ceramics	19.9	17.9
Polyoxymethylene (POM)	19.7	17.7
Soft PEX	18	16.2
ABS	5	4.5
EPDM	4.05	3.6
TPE	2.5	2.2
NBR	1.4	1.3
PTFE	0.2	0.18
<b>TOTAL</b>	<b>1111.7</b>	<b>1000</b>
<b>Packaging materials</b>		
Cardboard box	124	111.5



## Environmental Information

### Potential environmental impact – mandatory indicators according to EN 15804

Results per 1 kg of brass mixer										
Indicator	Unit	A1	A2	A3	Tot.A1-A3	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	4,91E+00	1,92E-01	3,91E-01	5,50E+00	0	1,63E-02	1,03E-03	2,74E-01	-1,52E+00
GWP-biogenic	kg CO <sub>2</sub> eq.	3,95E-02	2,65E-04	4,06E-02	8,04E-02	0	3,95E-05	5,27E-05	3,73E-05	4,29E-03
GWP-luluc	kg CO <sub>2</sub> eq.	5,42E-03	8,76E-05	2,07E-02	2,62E-02	0	5,57E-06	1,94E-06	1,78E-06	-2,21E-03
GWP-total	kg CO <sub>2</sub> eq.	4,96E+00	1,92E-01	4,52E-01	5,60E+00	0	1,63E-02	1,08E-03	2,74E-01	-1,52E+00
ODP	kg CFC 11 eq.	9,40E-07	4,36E-08	8,26E-08	1,07E-06	0	3,70E-09	6,42E-11	1,07E-09	-9,00E-08
AP	mol H <sup>+</sup> eq.	2,55E-01	2,88E-03	5,10E-03	2,63E-01	0	4,53E-05	5,95E-06	7,35E-05	-1,42E-01
EP-freshwater	kg P eq.	3,33E-02	1,03E-05	1,50E-04	3,34E-02	0	1,11E-06	9,41E-07	9,30E-07	-1,90E-02
EP-freshwater	kg PO <sub>4</sub> eq.	1,09E-01	2,86E-04	7,90E-04	1,10E-01	0	8,09E-06	3,34E-06	3,41E-05	-6,15E-02
EP-marine	kg N eq.	1,67E-02	7,02E-04	6,79E-04	1,81E-02	0	9,43E-06	1,24E-06	3,93E-05	-8,17E-03
EP-terrestrial	mol N eq.	2,27E-01	7,78E-03	5,27E-03	2,40E-01	0	1,02E-04	1,17E-05	3,44E-04	-1,16E-01
POCP	kg NMVOC eq.	5,85E-02	2,13E-03	1,80E-03	6,24E-02	0	3,92E-05	3,27E-06	8,53E-05	-2,97E-02
ADP-minerals&metals*	kg Sb eq.	1,13E-03	3,95E-07	8,61E-06	1,14E-03	0	5,97E-08	9,43E-09	1,94E-08	-5,50E-04
ADP-fossil*	MJ	5,90E+01	2,85E+00	3,47E+01	9,65E+01	0	2,47E-01	2,05E-02	8,22E-02	-1,72E+01
WDP*	m <sup>3</sup>	6,01E+00	7,23E-03	1,02E+00	7,03E+00	0	6,86E-04	2,06E-04	1,43E-02	-1,37E+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 of these results are high or as there is limited experience with the indicator.

### Use of resources per 1 kg of brass mixer

Indicator	Unit	A1	A2	A3	Tot.A1-A3	C1	C2	C3	C4	D
PERE	MJ	6,29E+01	3,02E+00	3,51E+01	1,01E+02	0	2,62E-01	2,15E-02	8,84E-02	-1,84E+01
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6,29E+01	3,02E+00	3,51E+01	1,01E+02	0	2,62E-01	2,15E-02	8,84E-02	-1,84E+01
PENRE	MJ	1,14E+01	2,92E-02	1,09E+01	2,24E+01	0	3,37E-03	3,46E-03	2,23E-03	-5,06E+00
PENRM	MJ.	0	0	0	0	0	0	0	0	0
PENRT	MJ	1,14E+01	2,92E-02	1,09E+01	2,24E+01	0	3,37E-03	3,46E-03	2,23E-03	-5,06E+00
SM	kg	0.54	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m <sup>3</sup>	0	0	0	0	0	0	0	0	0
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 = Net use of fresh water									

### Waste production and output flows

#### Waste production\* per 1 kg of brass mixer

Indicator	Unit	A1	A2	A3	Tot.A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	0	0	0	0	0	0	0	0
Non-hazardous waste disposed	kg	0	0	0	0	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0	0	0	0	0

\*These indicators are presented according to Environdec's guidelines on resource use and waste indicators (<https://www.environdec.com/resources/indicators>).



### Output flows

Indicator	Unit	A1	A2	A3	Tot.A1-A3	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0	0	0	0	0
Material for recycling	kg	0	0	0.362	0.362	0	0	0	0.664	0
Materials for energy recovery	kg	0	0	0	0	0	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0	0	0	0	0	0
Exported energy, thermal	MJ	0	0	0	0	0	0	0	0	0

### Information on biogenic carbon content

Results per per 1 kg of brass mixer		
BIOGENIC CARBON CONTENT	Unit	QUANTITY
Biogenic carbon content in product	kg C	0
Biogenic carbon content in packaging	kg C	0.0199

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO<sub>2</sub>.

## Additional information

Drinking water is by far our most important natural resource and fundamental for our health. Worldwide the limitations regarding materials and their influences on drinking water quality are increasingly getting stricter. Therefore, the proper choice of suitable alloys for drinking water installations is one of the most crucial aspects. Technical, economic, and – with growing interest – hygienical characteristics have to be considered.

This product is produced with ECOBRASS, CUPHIN®, CuZn21Si3P.

This alloy is approved according to DIN 50930 – 6 This alloy can be used in drinking water applications for faucets including faucet extensions.

Also, this alloy complies with 4MS, RoHS II and REACH directives.

It is important when re-cycling to separate products in ECOBRASS from normal brass components, to not contaminate the different materials.

More than 20 percent of Sweden's energy use comes from heating and production of hot water. In a two-year project, RISE has shown that large savings are possible by using energy-efficient mixers (Folkeson et al., 2017). Researchers at RISE have carried out measurements in apartment buildings with mixers in different energy classes from Villeroy & Boch Gustavsberg & others.

Good energy-rated mixers have functions that reduce hot water use, such as cold start or resilient controls. The results show that it is possible to save about 28% of the hot water used.

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