Environmental Profile

This LCA is calculated according to: ISO 14044, ISO 14040 and EN 15804

Ecochain v3.5.71

Product:	3053653 - DRAINCOCK BRASS 15MM 1 PK
Unit:	1 piece
Manufacturer:	Wavin - UK - Doncaster - Verified

LCA standard:	EN15804+A2 (2019)
Standard database:	Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified:	Yes
Issue date:	09-02-2023
End of validity:	09-02-2028
Verifier:	Martijn van Hövell - SGS Search

This LCA was evaluated according to EN15804+A2. It was concluded that the LCA complies with this standard.

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - UK - Doncaster - Verified (2020). (☑ = module declared, MND = module not declared).

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
☑	☑	☑	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	☑	☑	☑	☑

Product stage

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
C4 Disposal

Benefits and loads beyond the system boundaries

D Reuse- Recovery- Recycling- potential

Environmental impacts and parameters

GWP-total = EF EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 Climate Change - Land use and LU change [kg CO2 eq]; **ODP** = EF Ozone depletion [kg CFC11 eq]; **AP** = EF Acidification [mol H+ eq]; **EP-fw** = EF Eutrophication, freshwater [kg P eq]; **EP-m** = EF Eutrophication, marine [kg N eq]; **EP-T** = EF Eutrophication, terrestrial [mol N eq]; **POCP** = EF Photochemical ozone formation [kg NMVOC eq]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF Resource use, fossils [MJ]; **WDP** = EF Water use [m3 depriv.]; **PM** = EF Particulate matter [disease inc.]; **IR** = EF Ionising radiation [kBq U-235 eq]; **ETP-fw** = EF Ecotoxicity, freshwater [CTUe]; **HTP-c** = EF Human toxicity, cancer [CTUh]; **HTP-nc** = EF Human toxicity, non-cancer [CTUh]; **SQP** = EF Land use [Pt]; **PERE** = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total energy [MJ]; **SM** = Use of secondary material [kg]; **RSF** = Use of renewable secondary fuels [MJ]; **NRSF** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE** = Exported energy [MJ]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

Statement of Confidentiality

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.52E-1	2.13E-3	4.19E-5	4.54E-1	2.56E-3	1.39E-2	5.12E-5	-1.04E-1	3.67E-1
GWP-f	kg CO2 eq	4.51E-1	2.13E-3	3.84E-5	4.54E-1	2.55E-3	1.03E-2	5.11E-5	-1.10E-1	3.57E-1
GWP-b	kg CO2 eq	6.28E-5	1.29E-6	3.49E-6	6.76E-5	1.55E-6	3.58E-3	1.01E-7	6.40E-3	1.00E-2
GWP-luluc	kg CO2 eq	7.33E-4	7.55E-7	8.57E-9	7.34E-4	9.04E-7	2.23E-6	1.42E-8	-2.61E-4	4.76E-4
ODP	kg CFC11 eq	2.97E-8	4.91E-10	4.84E-12	3.02E-8	5.88E-10	4.21E-10	2.10E-11	-8.97E-9	2.22E-8
AP	mol H+ eq	3.90E-2	1.21E-5	6.65E-8	3.91E-2	1.45E-5	2.69E-5	4.85E-7	-2.96E-3	3.61E-2
EP-fw	kg P eq	3.13E-4	1.75E-8	2.16E-10	3.13E-4	2.10E-8	1.29E-7	5.73E-10	-2.56E-5	2.88E-4
EP-m	kg N eq	1.99E-3	4.35E-6	1.71E-8	2.00E-3	5.20E-6	6.91E-6	1.67E-7	-3.36E-4	1.67E-3
EP-T	mol N eq	2.93E-2	4.79E-5	1.53E-7	2.94E-2	5.73E-5	7.86E-5	1.84E-6	-4.76E-3	2.47E-2
POCP	kg NMVOC eq	7.78E-3	1.37E-5	5.08E-8	7.79E-3	1.64E-5	2.22E-5	5.34E-7	-1.09E-3	6.75E-3
ADP-mm	kg Sb eq	2.50E-3	5.52E-8	2.15E-10	2.50E-3	6.61E-8	1.16E-7	4.67E-10	-1.17E-3	1.33E-3
ADP-f	MJ	5.36E+0	3.27E-2	5.61E-4	5.39E+0	3.92E-2	3.60E-2	1.43E-3	-1.54E+0	3.93E+0
WDP	m3 depriv.	3.78E-1	1.00E-4	4.58E-6	3.78E-1	1.20E-4	7.48E-5	6.40E-5	-1.08E-1	2.70E-1
PM	disease inc.	8.74E-8	1.92E-10	4.88E-13	8.76E-8	2.30E-10	3.79E-10	9.41E-12	-1.14E-8	7.68E-8
IR	kBq U-235 eq	2.11E-2	1.43E-4	4.28E-7	2.12E-2	1.71E-4	1.68E-4	5.86E-6	-8.83E-3	1.27E-2
ETP-fw	CTUe	3.88E+2	2.66E-2	3.03E-4	3.88E+2	3.18E-2	1.28E-1	9.26E-4	-5.52E+1	3.33E+2
HTP-c	CTUh	5.61E-9	9.46E-13	1.32E-14	5.62E-9	1.13E-12	5.20E-12	2.14E-14	-1.23E-9	4.40E-9
HTP-nc	CTUh	4.52E-7	3.17E-11	2.60E-13	4.52E-7	3.79E-11	1.44E-10	6.59E-13	-7.82E-8	3.74E-7
SQP	Pt	6.34E+0	2.80E-2	4.72E-5	6.37E+0	3.35E-2	5.73E-2	3.00E-3	-2.60E+0	3.86E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.33E+0	4.70E-4	4.69E-4	1.33E+0	5.62E-4	4.00E-3	1.15E-5	-5.97E-1	7.37E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.33E+0	4.70E-4	4.69E-4	1.33E+0	5.62E-4	4.00E-3	1.15E-5	-5.97E-1	7.37E-1
PENRE	MJ	5.71E+0	3.47E-2	6.18E-4	5.75E+0	4.16E-2	3.82E-2	1.52E-3	-1.64E+0	4.19E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.71E+0	3.47E-2	6.18E-4	5.75E+0	4.16E-2	3.82E-2	1.52E-3	-1.64E+0	4.19E+0
PET	MJ	7.04E+0	3.52E-2	1.09E-3	7.08E+0	4.22E-2	4.22E-2	1.53E-3	-2.24E+0	4.93E+0
SM	kg	0	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	m3	1.00E-2	3.70E-6	1.29E-7	1.00E-2	4.44E-6	1.03E-5	1.53E-6	-2.95E-3	7.10E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.12E-4	8.37E-8	6.71E-10	3.12E-4	1.00E-7	1.03E-7	2.13E-9	-1.47E-4	1.65E-4
NHWD	kg	1.53E-1	2.03E-3	3.12E-6	1.55E-1	2.43E-3	1.59E-3	9.70E-3	-5.12E-2	1.17E-1
RWD	kg	1.78E-5	2.23E-7	5.07E-10	1.80E-5	2.67E-7	2.14E-7	9.38E-9	-7.12E-6	1.14E-5
CRU	kg	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0
EE	MJ	0	0	0	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0

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