

Environmental Profile

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

Ecochain v3.5.71



Product: 4013770 - Hep20 Brass draincock 15mm
 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



Suitable for various professional plumbing jobs. Hep20 is packed with unique features that make push-fit plumbing fitting easier quicker and more secure for installers. No additional equipment or tools required when installing or demounting fittings compared to others where a solder or glue is required. Just push the pipework into the fitting to create a watertight seal. A wide range of plastic fittings, plumbing pipes and tubes are available. It is the only system with joint recognition and se

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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.39E-1	1.94E-3	4.28E-5	4.41E-1	2.56E-3	4.38E-3	5.12E-5	-1.04E-1	3.43E-1
GWP-f	kg CO2 eq	4.38E-1	1.93E-3	3.92E-5	4.40E-1	2.55E-3	4.47E-3	5.11E-5	-1.02E-1	3.45E-1
GWP-b	kg CO2 eq	9.42E-5	1.17E-6	3.56E-6	9.90E-5	1.55E-6	-9.40E-5	1.01E-7	-2.00E-3	-2.00E-3
GWP-luluc	kg CO2 eq	6.82E-4	6.85E-7	8.75E-9	6.82E-4	9.04E-7	1.97E-6	1.42E-8	-2.02E-4	4.83E-4
ODP	kg CFC11 eq	2.85E-8	4.46E-10	4.94E-12	2.90E-8	5.88E-10	2.92E-10	2.10E-11	-8.03E-9	2.18E-8
AP	mol H+ eq	3.90E-2	1.10E-5	6.78E-8	3.90E-2	1.45E-5	2.20E-5	4.85E-7	-2.92E-3	3.61E-2
EP-fw	kg P eq	3.13E-4	1.59E-8	2.20E-10	3.13E-4	2.10E-8	1.19E-7	5.73E-10	-2.49E-5	2.88E-4
EP-m	kg N eq	1.97E-3	3.94E-6	1.75E-8	1.98E-3	5.20E-6	5.05E-6	1.67E-7	-3.26E-4	1.66E-3
EP-T	mol N eq	2.91E-2	4.35E-5	1.56E-7	2.92E-2	5.73E-5	5.83E-5	1.84E-6	-4.65E-3	2.46E-2
POCP	kg NMVOC eq	7.72E-3	1.24E-5	5.18E-8	7.74E-3	1.64E-5	1.62E-5	5.34E-7	-1.06E-3	6.71E-3
ADP-mm	kg Sb eq	2.50E-3	5.01E-8	2.20E-10	2.50E-3	6.61E-8	9.77E-8	4.67E-10	-1.17E-3	1.33E-3
ADP-f	MJ	5.09E+0	2.97E-2	5.73E-4	5.12E+0	3.92E-2	2.74E-2	1.43E-3	-1.40E+0	3.78E+0
WDP	m3 depriv.	3.70E-1	9.11E-5	4.67E-6	3.70E-1	1.20E-4	-3.59E-6	6.40E-5	-9.61E-2	2.74E-1
PM	disease inc.	8.65E-8	1.75E-10	4.98E-13	8.67E-8	2.30E-10	3.09E-10	9.41E-12	-1.06E-8	7.67E-8
IR	kBq U-235 eq	2.05E-2	1.30E-4	4.37E-7	2.07E-2	1.71E-4	1.31E-4	5.86E-6	-8.29E-3	1.27E-2
ETP-fw	CTUe	3.87E+2	2.41E-2	3.10E-4	3.87E+2	3.18E-2	1.11E-1	9.26E-4	-5.46E+1	3.32E+2
HTP-c	CTUh	5.61E-9	8.58E-13	1.35E-14	5.61E-9	1.13E-12	3.39E-12	2.14E-14	-1.22E-9	4.39E-9
HTP-nc	CTUh	4.52E-7	2.87E-11	2.65E-13	4.52E-7	3.79E-11	1.25E-10	6.59E-13	-7.80E-8	3.74E-7
SQP	Pt	5.98E+0	2.54E-2	4.82E-5	6.00E+0	3.35E-2	5.21E-2	3.00E-3	-1.09E+0	5.00E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.25E+0	4.26E-4	4.78E-4	1.25E+0	5.62E-4	3.73E-3	1.15E-5	-3.24E-1	9.33E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.25E+0	4.26E-4	4.78E-4	1.25E+0	5.62E-4	3.73E-3	1.15E-5	-3.24E-1	9.33E-1
PENRE	MJ	5.42E+0	3.15E-2	6.30E-4	5.45E+0	4.16E-2	2.90E-2	1.52E-3	-1.50E+0	4.03E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.42E+0	3.15E-2	6.30E-4	5.45E+0	4.16E-2	2.90E-2	1.52E-3	-1.50E+0	4.03E+0
PET	MJ	6.67E+0	3.20E-2	1.11E-3	6.70E+0	4.22E-2	3.28E-2	1.53E-3	-1.82E+0	4.96E+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	9.82E-3	3.36E-6	1.31E-7	9.82E-3	4.44E-6	6.07E-6	1.53E-6	-2.63E-3	7.20E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.11E-4	7.59E-8	6.85E-10	3.12E-4	1.00E-7	7.98E-8	2.13E-9	-1.46E-4	1.65E-4
NHWD	kg	1.51E-1	1.84E-3	3.18E-6	1.53E-1	2.43E-3	1.00E-3	9.70E-3	-5.05E-2	1.16E-1
RWD	kg	1.73E-5	2.02E-7	5.18E-10	1.75E-5	2.67E-7	1.60E-7	9.38E-9	-6.60E-6	1.13E-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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