

Environmental Profile

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

Ecochain v3.5.71



Product: 3030664 - Hep20 Brass Adapter 28x1 PF/TF
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					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage					Benefits and loads beyond the system boundaries											
A4 Transport gate to site A5 Assembly / Construction installation process					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	1.11E+0	7.92E-3	9.85E-2	1.22E+0	5.59E-3	4.71E-2	4.61E-4	-3.41E-1	9.32E-1
GWP-f	kg CO2 eq	1.12E+0	7.91E-3	9.04E-2	1.22E+0	5.58E-3	3.07E-2	4.61E-4	-3.42E-1	9.12E-1
GWP-b	kg CO2 eq	-5.68E-3	4.69E-6	8.06E-3	2.39E-3	3.39E-6	1.64E-2	5.57E-7	1.18E-3	1.99E-2
GWP-luluc	kg CO2 eq	1.34E-3	2.84E-6	2.17E-5	1.37E-3	1.98E-6	5.77E-6	3.37E-8	-4.51E-4	9.23E-4
ODP	kg CFC11 eq	5.71E-8	1.82E-9	1.13E-8	7.01E-8	1.29E-9	1.26E-9	4.92E-11	-1.66E-8	5.61E-8
AP	mol H+ eq	7.40E-2	4.87E-5	1.63E-4	7.42E-2	3.18E-5	6.70E-5	1.15E-6	-6.02E-3	6.83E-2
EP-fw	kg P eq	5.88E-4	6.45E-8	5.22E-7	5.89E-4	4.59E-8	3.31E-7	1.40E-9	-4.89E-5	5.40E-4
EP-m	kg N eq	3.96E-3	1.70E-5	4.09E-5	4.01E-3	1.14E-5	1.76E-5	7.80E-7	-7.40E-4	3.30E-3
EP-T	mol N eq	5.70E-2	1.87E-4	3.70E-4	5.76E-2	1.25E-4	1.98E-4	4.42E-6	-9.97E-3	4.80E-2
POCP	kg NMVOC eq	1.53E-2	5.31E-5	1.22E-4	1.55E-2	3.58E-5	5.61E-5	1.36E-6	-2.41E-3	1.32E-2
ADP-mm	kg Sb eq	4.67E-3	2.02E-7	5.54E-7	4.67E-3	1.44E-7	2.89E-7	1.11E-9	-2.18E-3	2.49E-3
ADP-f	MJ	1.30E+1	1.21E-1	1.31E+0	1.44E+1	8.57E-2	1.25E-1	3.40E-3	-4.42E+0	1.02E+1
WDP	m3 depriv.	7.89E-1	3.69E-4	1.10E-2	8.00E-1	2.63E-4	1.54E-3	1.23E-4	-2.36E-1	5.66E-1
PM	disease inc.	1.73E-7	7.06E-10	1.20E-9	1.75E-7	5.04E-10	9.49E-10	2.26E-11	-2.55E-8	1.51E-7
IR	kBq U-235 eq	3.97E-2	5.29E-4	1.02E-3	4.12E-2	3.74E-4	4.87E-4	1.45E-5	-1.62E-2	2.59E-2
ETP-fw	CTUe	7.23E+2	9.81E-2	7.60E-1	7.24E+2	6.96E-2	3.34E-1	3.28E-3	-1.03E+2	6.22E+2
HTP-c	CTUh	1.05E-8	3.52E-12	3.29E-11	1.06E-8	2.48E-12	1.60E-11	5.94E-14	-2.30E-9	8.29E-9
HTP-nc	CTUh	8.45E-7	1.16E-10	6.53E-10	8.45E-7	8.29E-11	3.73E-10	1.85E-12	-1.46E-7	7.00E-7
SQP	Pt	1.23E+1	1.02E-1	1.16E-1	1.25E+1	7.33E-2	-2.80E-1	7.46E-3	-3.94E+0	8.35E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.53E+0	1.72E-3	1.23E+0	3.76E+0	1.23E-3	-5.32E-2	5.55E-5	-9.60E-1	2.75E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.53E+0	1.72E-3	1.23E+0	3.76E+0	1.23E-3	-5.32E-2	5.55E-5	-9.60E-1	2.75E+0
PENRE	MJ	1.39E+1	1.29E-1	1.45E+0	1.55E+1	9.10E-2	1.33E-1	3.61E-3	-4.74E+0	1.10E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.39E+1	1.29E-1	1.45E+0	1.55E+1	9.10E-2	1.33E-1	3.61E-3	-4.74E+0	1.10E+1
PET	MJ	1.64E+1	1.30E-1	2.67E+0	1.92E+1	9.22E-2	8.01E-2	3.67E-3	-5.70E+0	1.37E+1
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	2.07E-2	1.36E-5	3.11E-4	2.10E-2	9.69E-6	6.20E-5	3.76E-6	-6.28E-3	1.48E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.82E-4	3.07E-7	1.55E-6	5.84E-4	2.19E-7	2.73E-7	4.86E-9	-2.73E-4	3.11E-4
NHWD	kg	2.95E-1	7.40E-3	7.21E-3	3.10E-1	5.31E-3	5.75E-3	2.13E-2	-9.63E-2	2.46E-1
RWD	kg	3.39E-5	8.24E-7	1.17E-6	3.59E-5	5.83E-7	6.14E-7	2.23E-8	-1.30E-5	2.41E-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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