

Environmental Profile

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

Ecochain v3.5.71



Product: 3030668 - Hep20 Brass Adapter 28x1 PF/TM
Unit: 1 piece
Manufacturer: Wavin - UK - Doncaster - Verified

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

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					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	1.10E+0	7.71E-3	8.23E-2	1.19E+0	5.53E-3	3.05E-2	4.60E-4	-3.39E-1	8.87E-1
GWP-f	kg CO2 eq	1.10E+0	7.70E-3	7.56E-2	1.18E+0	5.53E-3	3.07E-2	4.60E-4	-3.34E-1	8.83E-1
GWP-b	kg CO2 eq	8.02E-4	4.56E-6	6.72E-3	7.52E-3	3.36E-6	-2.04E-4	5.54E-7	-3.95E-3	3.37E-3
GWP-luluc	kg CO2 eq	1.26E-3	2.76E-6	1.84E-5	1.29E-3	1.96E-6	8.29E-6	3.34E-8	-3.73E-4	9.22E-4
ODP	kg CFC11 eq	5.50E-8	1.77E-9	9.39E-9	6.62E-8	1.27E-9	1.20E-9	4.88E-11	-1.57E-8	5.30E-8
AP	mol H+ eq	7.31E-2	4.75E-5	1.38E-4	7.33E-2	3.15E-5	6.66E-5	1.14E-6	-5.91E-3	6.75E-2
EP-fw	kg P eq	5.81E-4	6.28E-8	4.39E-7	5.81E-4	4.55E-8	3.56E-7	1.38E-9	-4.75E-5	5.34E-4
EP-m	kg N eq	3.89E-3	1.65E-5	3.44E-5	3.94E-3	1.13E-5	1.70E-5	7.77E-7	-7.21E-4	3.25E-3
EP-T	mol N eq	5.62E-2	1.82E-4	3.11E-4	5.67E-2	1.24E-4	1.91E-4	4.38E-6	-9.75E-3	4.73E-2
POCP	kg NMVOC eq	1.51E-2	5.17E-5	1.03E-4	1.53E-2	3.55E-5	5.57E-5	1.34E-6	-2.35E-3	1.30E-2
ADP-mm	kg Sb eq	4.61E-3	1.97E-7	4.71E-7	4.61E-3	1.43E-7	2.80E-7	1.10E-9	-2.15E-3	2.46E-3
ADP-f	MJ	1.27E+1	1.18E-1	1.10E+0	1.39E+1	8.49E-2	1.30E-1	3.37E-3	-4.29E+0	9.85E+0
WDP	m3 depriv.	7.77E-1	3.59E-4	9.20E-3	7.87E-1	2.60E-4	1.70E-3	1.22E-4	-2.19E-1	5.70E-1
PM	disease inc.	1.70E-7	6.87E-10	1.01E-9	1.72E-7	4.99E-10	9.76E-10	2.24E-11	-2.43E-8	1.49E-7
IR	kBq U-235 eq	3.87E-2	5.15E-4	8.51E-4	4.01E-2	3.71E-4	4.81E-4	1.44E-5	-1.54E-2	2.56E-2
ETP-fw	CTUe	7.14E+2	9.54E-2	6.43E-1	7.14E+2	6.89E-2	3.33E-1	3.26E-3	-1.01E+2	6.14E+2
HTP-c	CTUh	1.04E-8	3.43E-12	2.78E-11	1.04E-8	2.45E-12	1.67E-11	5.90E-14	-2.26E-9	8.19E-9
HTP-nc	CTUh	8.35E-7	1.13E-10	5.53E-10	8.36E-7	8.21E-11	3.71E-10	1.84E-12	-1.44E-7	6.92E-7
SQP	Pt	1.11E+1	9.96E-2	9.82E-2	1.13E+1	7.26E-2	1.58E-1	7.39E-3	-2.02E+0	9.54E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.34E+0	1.68E-3	1.05E+0	3.39E+0	1.22E-3	1.09E-2	5.53E-5	-6.07E-1	2.79E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.34E+0	1.68E-3	1.05E+0	3.39E+0	1.22E-3	1.09E-2	5.53E-5	-6.07E-1	2.79E+0
PENRE	MJ	1.36E+1	1.25E-1	1.21E+0	1.49E+1	9.01E-2	1.38E-1	3.58E-3	-4.60E+0	1.05E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.36E+1	1.25E-1	1.21E+0	1.49E+1	9.01E-2	1.38E-1	3.58E-3	-4.60E+0	1.05E+1
PET	MJ	1.59E+1	1.27E-1	2.25E+0	1.83E+1	9.13E-2	1.49E-1	3.63E-3	-5.21E+0	1.33E+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	2.03E-2	1.32E-5	2.61E-4	2.06E-2	9.60E-6	6.52E-5	3.73E-6	-5.84E-3	1.49E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.75E-4	2.99E-7	1.29E-6	5.77E-4	2.17E-7	2.80E-7	4.81E-9	-2.70E-4	3.07E-4
NHWD	kg	2.89E-1	7.20E-3	6.01E-3	3.02E-1	5.26E-3	5.55E-3	2.11E-2	-9.45E-2	2.39E-1
RWD	kg	3.29E-5	8.02E-7	9.78E-7	3.47E-5	5.77E-7	5.95E-7	2.22E-8	-1.23E-5	2.36E-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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