

Environmental Profile

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

Ecochain v3.5.71



Product: 3031019 - Hep20 Brass Adapter 15x1/2 SP/TF
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	2.42E-1	1.07E-3	2.36E-2	2.67E-1	1.42E-3	9.96E-4	2.85E-5	-5.72E-2	2.12E-1
GWP-f	kg CO2 eq	2.42E-1	1.07E-3	2.16E-2	2.65E-1	1.42E-3	1.05E-3	2.84E-5	-5.59E-2	2.11E-1
GWP-b	kg CO2 eq	9.55E-5	6.47E-7	1.96E-3	2.06E-3	8.63E-7	-5.24E-5	5.64E-8	-1.11E-3	8.92E-4
GWP-luluc	kg CO2 eq	3.78E-4	3.77E-7	4.82E-6	3.83E-4	5.03E-7	1.09E-6	7.93E-9	-1.12E-4	2.72E-4
ODP	kg CFC11 eq	1.58E-8	2.46E-10	2.72E-9	1.88E-8	3.28E-10	1.59E-10	1.17E-11	-4.38E-9	1.49E-8
AP	mol H+ eq	2.17E-2	6.07E-6	3.74E-5	2.17E-2	8.10E-6	1.20E-5	2.70E-7	-1.63E-3	2.01E-2
EP-fw	kg P eq	1.74E-4	8.77E-9	1.21E-7	1.74E-4	1.17E-8	6.59E-8	3.19E-10	-1.39E-5	1.60E-4
EP-m	kg N eq	1.10E-3	2.17E-6	9.62E-6	1.11E-3	2.90E-6	2.71E-6	9.28E-8	-1.82E-4	9.34E-4
EP-T	mol N eq	1.62E-2	2.39E-5	8.60E-5	1.63E-2	3.19E-5	3.14E-5	1.02E-6	-2.58E-3	1.38E-2
POCP	kg NMVOC eq	4.29E-3	6.85E-6	2.86E-5	4.33E-3	9.13E-6	8.69E-6	2.97E-7	-5.87E-4	3.76E-3
ADP-mm	kg Sb eq	1.39E-3	2.76E-8	1.21E-7	1.39E-3	3.68E-8	5.40E-8	2.60E-10	-6.49E-4	7.41E-4
ADP-f	MJ	2.78E+0	1.64E-2	3.15E-1	3.12E+0	2.18E-2	1.50E-2	7.95E-4	-7.66E-1	2.39E+0
WDP	m3 depriv.	2.05E-1	5.02E-5	2.57E-3	2.07E-1	6.70E-5	-6.79E-6	3.56E-5	-5.34E-2	1.54E-1
PM	disease inc.	4.81E-8	9.62E-11	2.75E-10	4.85E-8	1.28E-10	1.70E-10	5.24E-12	-5.88E-9	4.29E-8
IR	kBq U-235 eq	1.14E-2	7.15E-5	2.41E-4	1.17E-2	9.54E-5	7.18E-5	3.26E-6	-4.61E-3	7.26E-3
ETP-fw	CTUe	2.15E+2	1.33E-2	1.71E-1	2.15E+2	1.77E-2	6.11E-2	5.16E-4	-3.04E+1	1.85E+2
HTP-c	CTUh	3.12E-9	4.73E-13	7.43E-12	3.13E-9	6.30E-13	1.70E-12	1.19E-14	-6.80E-10	2.45E-9
HTP-nc	CTUh	2.52E-7	1.58E-11	1.46E-10	2.52E-7	2.11E-11	6.81E-11	3.67E-13	-4.34E-8	2.09E-7
SQP	Pt	3.32E+0	1.40E-2	2.65E-2	3.36E+0	1.87E-2	2.88E-2	1.67E-3	-6.06E-1	2.80E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.95E-1	2.35E-4	2.64E-1	9.59E-1	3.13E-4	2.07E-3	6.43E-6	-1.80E-1	7.81E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.95E-1	2.35E-4	2.64E-1	9.59E-1	3.13E-4	2.07E-3	6.43E-6	-1.80E-1	7.81E-1
PENRE	MJ	2.97E+0	1.74E-2	3.47E-1	3.33E+0	2.32E-2	1.58E-2	8.44E-4	-8.15E-1	2.56E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.97E+0	1.74E-2	3.47E-1	3.33E+0	2.32E-2	1.58E-2	8.44E-4	-8.15E-1	2.56E+0
PET	MJ	3.66E+0	1.76E-2	6.11E-1	4.29E+0	2.35E-2	1.79E-2	8.51E-4	-9.95E-1	3.34E+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	5.44E-3	1.85E-6	7.24E-5	5.51E-3	2.47E-6	3.04E-6	8.49E-7	-1.46E-3	4.05E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.73E-4	4.18E-8	3.77E-7	1.74E-4	5.58E-8	4.36E-8	1.19E-9	-8.15E-5	9.24E-5
NHWD	kg	8.40E-2	1.01E-3	1.75E-3	8.67E-2	1.35E-3	4.82E-4	5.40E-3	-2.81E-2	6.59E-2
RWD	kg	9.58E-6	1.11E-7	2.85E-7	9.98E-6	1.48E-7	8.78E-8	5.22E-9	-3.67E-6	6.55E-6
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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