

Environmental Profile

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

Ecochain v3.5.71



Product: 3030665 - Hep20 Brass Adapter 15x3/4 PF/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	4.54E-1	3.08E-3	3.99E-2	4.97E-1	2.32E-3	1.48E-2	1.89E-4	-1.36E-1	3.77E-1
GWP-f	kg CO2 eq	4.53E-1	3.08E-3	3.67E-2	4.93E-1	2.32E-3	1.49E-2	1.89E-4	-1.35E-1	3.75E-1
GWP-b	kg CO2 eq	2.56E-4	1.83E-6	3.19E-3	3.45E-3	1.41E-6	-8.48E-5	2.29E-7	-1.66E-3	1.71E-3
GWP-luluc	kg CO2 eq	5.39E-4	1.10E-6	9.78E-6	5.50E-4	8.20E-7	3.28E-6	1.41E-8	-1.59E-4	3.96E-4
ODP	kg CFC11 eq	2.41E-8	7.08E-10	4.50E-9	2.93E-8	5.34E-10	4.80E-10	2.05E-11	-6.76E-9	2.36E-8
AP	mol H+ eq	3.10E-2	1.89E-5	7.06E-5	3.11E-2	1.32E-5	2.73E-5	4.81E-7	-2.48E-3	2.87E-2
EP-fw	kg P eq	2.46E-4	2.51E-8	2.21E-7	2.47E-4	1.91E-8	1.44E-7	5.82E-10	-2.01E-5	2.27E-4
EP-m	kg N eq	1.64E-3	6.58E-6	1.71E-5	1.67E-3	4.72E-6	6.95E-6	3.21E-7	-3.00E-4	1.38E-3
EP-T	mol N eq	2.38E-2	7.26E-5	1.56E-4	2.40E-2	5.20E-5	7.84E-5	1.84E-6	-4.07E-3	2.01E-2
POCP	kg NMVOC eq	6.38E-3	2.06E-5	5.15E-5	6.45E-3	1.49E-5	2.27E-5	5.64E-7	-9.77E-4	5.52E-3
ADP-mm	kg Sb eq	1.96E-3	7.87E-8	2.54E-7	1.96E-3	5.99E-8	1.14E-7	4.65E-10	-9.14E-4	1.05E-3
ADP-f	MJ	5.30E+0	4.72E-2	5.31E-1	5.88E+0	3.56E-2	5.11E-2	1.42E-3	-1.75E+0	4.22E+0
WDP	m3 depriv.	3.27E-1	1.44E-4	4.58E-3	3.31E-1	1.09E-4	6.65E-4	5.15E-5	-9.07E-2	2.41E-1
PM	disease inc.	7.20E-8	2.75E-10	5.18E-10	7.28E-8	2.09E-10	3.94E-10	9.41E-12	-1.00E-8	6.33E-8
IR	kBq U-235 eq	1.67E-2	2.06E-4	4.18E-4	1.73E-2	1.55E-4	1.92E-4	6.03E-6	-6.54E-3	1.11E-2
ETP-fw	CTUe	3.03E+2	3.82E-2	3.37E-1	3.03E+2	2.89E-2	1.40E-1	1.36E-3	-4.28E+1	2.61E+2
HTP-c	CTUh	4.42E-9	1.37E-12	1.44E-11	4.43E-9	1.03E-12	6.51E-12	2.47E-14	-9.61E-10	3.48E-9
HTP-nc	CTUh	3.55E-7	4.53E-11	2.91E-10	3.55E-7	3.44E-11	1.52E-10	7.70E-13	-6.12E-8	2.94E-7
SQP	Pt	4.75E+0	3.99E-2	5.05E-2	4.84E+0	3.04E-2	6.38E-2	3.11E-3	-8.57E-1	4.08E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.95E-1	6.71E-4	5.72E-1	1.57E+0	5.10E-4	4.43E-3	2.28E-5	-2.57E-1	1.32E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.95E-1	6.71E-4	5.72E-1	1.57E+0	5.10E-4	4.43E-3	2.28E-5	-2.57E-1	1.32E+0
PENRE	MJ	5.66E+0	5.01E-2	5.84E-1	6.30E+0	3.78E-2	5.43E-2	1.51E-3	-1.87E+0	4.52E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.66E+0	5.01E-2	5.84E-1	6.30E+0	3.78E-2	5.43E-2	1.51E-3	-1.87E+0	4.52E+0
PET	MJ	6.66E+0	5.07E-2	1.16E+0	7.87E+0	3.83E-2	5.88E-2	1.53E-3	-2.13E+0	5.83E+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	8.56E-3	5.29E-6	1.31E-4	8.70E-3	4.02E-6	2.90E-5	1.57E-6	-2.42E-3	6.31E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.44E-4	1.20E-7	6.15E-7	2.45E-4	9.10E-8	1.14E-7	2.03E-9	-1.15E-4	1.30E-4
NHWD	kg	1.23E-1	2.88E-3	2.86E-3	1.28E-1	2.20E-3	2.22E-3	8.90E-3	-4.00E-2	1.02E-1
RWD	kg	1.43E-5	3.21E-7	4.65E-7	1.51E-5	2.42E-7	2.38E-7	9.32E-9	-5.22E-6	1.04E-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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