

Environmental Profile

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

Ecochain v3.5.71



Product: 3030669 - Hep20 Brass Adapter 22x3/4 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	7.50E-1	5.38E-3	6.35E-2	8.18E-1	3.77E-3	3.77E-2	3.16E-4	-2.31E-1	6.29E-1
GWP-f	kg CO2 eq	7.55E-1	5.37E-3	5.84E-2	8.18E-1	3.76E-3	2.21E-2	3.16E-4	-2.31E-1	6.14E-1
GWP-b	kg CO2 eq	-6.02E-3	3.19E-6	5.15E-3	-8.63E-4	2.29E-6	1.55E-2	3.80E-7	3.81E-4	1.50E-2
GWP-luluc	kg CO2 eq	9.14E-4	1.93E-6	1.46E-5	9.30E-4	1.33E-6	2.98E-6	2.28E-8	-3.13E-4	6.21E-4
ODP	kg CFC11 eq	3.91E-8	1.24E-9	7.22E-9	4.75E-8	8.68E-10	8.37E-10	3.33E-11	-1.14E-8	3.79E-8
AP	mol H+ eq	4.99E-2	3.31E-5	1.08E-4	5.00E-2	2.14E-5	4.43E-5	7.80E-7	-4.06E-3	4.60E-2
EP-fw	kg P eq	3.96E-4	4.38E-8	3.42E-7	3.97E-4	3.10E-8	2.11E-7	9.45E-10	-3.31E-5	3.64E-4
EP-m	kg N eq	2.67E-3	1.15E-5	2.67E-5	2.71E-3	7.67E-6	1.17E-5	5.32E-7	-4.99E-4	2.23E-3
EP-T	mol N eq	3.85E-2	1.27E-4	2.42E-4	3.88E-2	8.46E-5	1.31E-4	2.99E-6	-6.73E-3	3.23E-2
POCP	kg NMVOC eq	1.03E-2	3.60E-5	8.01E-5	1.04E-2	2.42E-5	3.68E-5	9.18E-7	-1.63E-3	8.89E-3
ADP-mm	kg Sb eq	3.14E-3	1.37E-7	3.75E-7	3.15E-3	9.74E-8	1.93E-7	7.54E-10	-1.47E-3	1.68E-3
ADP-f	MJ	8.80E+0	8.23E-2	8.46E-1	9.73E+0	5.78E-2	8.09E-2	2.30E-3	-2.99E+0	6.88E+0
WDP	m3 depriv.	5.33E-1	2.50E-4	7.15E-3	5.40E-1	1.77E-4	9.82E-4	8.28E-5	-1.61E-1	3.80E-1
PM	disease inc.	1.17E-7	4.80E-10	7.93E-10	1.18E-7	3.40E-10	6.13E-10	1.53E-11	-1.73E-8	1.02E-7
IR	kBq U-235 eq	2.70E-2	3.60E-4	6.59E-4	2.80E-2	2.53E-4	3.20E-4	9.81E-6	-1.10E-2	1.76E-2
ETP-fw	CTUe	4.88E+2	6.66E-2	5.08E-1	4.88E+2	4.69E-2	2.23E-1	2.23E-3	-6.94E+1	4.19E+2
HTP-c	CTUh	7.10E-9	2.39E-12	2.19E-11	7.12E-9	1.67E-12	1.02E-11	4.03E-14	-1.55E-9	5.59E-9
HTP-nc	CTUh	5.69E-7	7.91E-11	4.37E-10	5.70E-7	5.59E-11	2.48E-10	1.26E-12	-9.85E-8	4.72E-7
SQP	Pt	8.50E+0	6.96E-2	7.70E-2	8.65E+0	4.94E-2	-3.34E-1	5.05E-3	-2.90E+0	5.47E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.75E+0	1.17E-3	8.36E-1	2.58E+0	8.29E-4	-5.69E-2	3.79E-5	-6.92E-1	1.84E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.75E+0	1.17E-3	8.36E-1	2.58E+0	8.29E-4	-5.69E-2	3.79E-5	-6.92E-1	1.84E+0
PENRE	MJ	9.41E+0	8.73E-2	9.31E-1	1.04E+1	6.14E-2	8.60E-2	2.44E-3	-3.20E+0	7.37E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.41E+0	8.73E-2	9.31E-1	1.04E+1	6.14E-2	8.60E-2	2.44E-3	-3.20E+0	7.37E+0
PET	MJ	1.12E+1	8.85E-2	1.77E+0	1.30E+1	6.22E-2	2.91E-2	2.48E-3	-3.90E+0	9.21E+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	1.40E-2	9.24E-6	2.04E-4	1.42E-2	6.54E-6	4.19E-5	2.55E-6	-4.28E-3	9.96E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.92E-4	2.08E-7	9.92E-7	3.93E-4	1.48E-7	1.77E-7	3.29E-9	-1.84E-4	2.09E-4
NHWD	kg	1.99E-1	5.03E-3	4.61E-3	2.09E-1	3.58E-3	3.88E-3	1.44E-2	-6.50E-2	1.66E-1
RWD	kg	2.31E-5	5.60E-7	7.51E-7	2.44E-5	3.93E-7	4.06E-7	1.51E-8	-8.86E-6	1.64E-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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