

Environmental Profile

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

Ecochain v3.5.71



Product: 3031358 - Hep20 Brass Adapter 28x1 PF/TM NDZR
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	1.21E+0	8.20E-3	1.04E-1	1.32E+0	6.19E-3	3.10E-2	4.73E-4	-3.65E-1	9.97E-1
GWP-f	kg CO2 eq	1.21E+0	8.19E-3	9.52E-2	1.31E+0	6.19E-3	3.12E-2	4.73E-4	-3.60E-1	9.92E-1
GWP-b	kg CO2 eq	8.63E-4	4.86E-6	8.50E-3	9.36E-3	3.76E-6	-2.29E-4	5.81E-7	-4.47E-3	4.67E-3
GWP-luluc	kg CO2 eq	1.44E-3	2.94E-6	2.28E-5	1.47E-3	2.19E-6	8.79E-6	3.71E-8	-4.25E-4	1.05E-3
ODP	kg CFC11 eq	6.24E-8	1.88E-9	1.19E-8	7.61E-8	1.43E-9	1.28E-9	5.42E-11	-1.77E-8	6.12E-8
AP	mol H+ eq	8.32E-2	5.03E-5	1.72E-4	8.34E-2	3.52E-5	7.22E-5	1.27E-6	-6.66E-3	7.69E-2
EP-fw	kg P eq	6.61E-4	6.68E-8	5.49E-7	6.62E-4	5.09E-8	3.86E-7	1.53E-9	-5.39E-5	6.09E-4
EP-m	kg N eq	4.40E-3	1.75E-5	4.31E-5	4.46E-3	1.26E-5	1.82E-5	8.20E-7	-8.05E-4	3.69E-3
EP-T	mol N eq	6.37E-2	1.93E-4	3.89E-4	6.43E-2	1.39E-4	2.06E-4	4.85E-6	-1.09E-2	5.37E-2
POCP	kg NMVOC eq	1.71E-2	5.49E-5	1.29E-4	1.73E-2	3.97E-5	5.97E-5	1.48E-6	-2.63E-3	1.48E-2
ADP-mm	kg Sb eq	5.26E-3	2.09E-7	5.81E-7	5.26E-3	1.60E-7	3.05E-7	1.23E-9	-2.45E-3	2.81E-3
ADP-f	MJ	1.40E+1	1.25E-1	1.38E+0	1.55E+1	9.50E-2	1.36E-1	3.74E-3	-4.65E+0	1.11E+1
WDP	m3 depriv.	8.72E-1	3.82E-4	1.15E-2	8.84E-1	2.91E-4	1.69E-3	1.38E-4	-2.44E-1	6.42E-1
PM	disease inc.	1.93E-7	7.32E-10	1.26E-9	1.95E-7	5.58E-10	1.05E-9	2.48E-11	-2.70E-8	1.69E-7
IR	kBq U-235 eq	4.40E-2	5.48E-4	1.07E-3	4.56E-2	4.15E-4	5.14E-4	1.59E-5	-1.75E-2	2.91E-2
ETP-fw	CTUe	8.13E+2	1.02E-1	7.98E-1	8.14E+2	7.71E-2	3.61E-1	3.50E-3	-1.15E+2	7.00E+2
HTP-c	CTUh	1.18E-8	3.65E-12	3.45E-11	1.19E-8	2.74E-12	1.75E-11	6.45E-14	-2.58E-9	9.33E-9
HTP-nc	CTUh	9.52E-7	1.21E-10	6.86E-10	9.53E-7	9.19E-11	4.02E-10	2.01E-12	-1.64E-7	7.89E-7
SQP	Pt	1.27E+1	1.06E-1	1.22E-1	1.29E+1	8.12E-2	1.71E-1	8.17E-3	-2.30E+0	1.09E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.66E+0	1.79E-3	1.28E+0	3.95E+0	1.36E-3	1.19E-2	5.82E-5	-6.90E-1	3.27E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.66E+0	1.79E-3	1.28E+0	3.95E+0	1.36E-3	1.19E-2	5.82E-5	-6.90E-1	3.27E+0
PENRE	MJ	1.50E+1	1.33E-1	1.52E+0	1.66E+1	1.01E-1	1.45E-1	3.97E-3	-4.98E+0	1.19E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.50E+1	1.33E-1	1.52E+0	1.66E+1	1.01E-1	1.45E-1	3.97E-3	-4.98E+0	1.19E+1
PET	MJ	1.76E+1	1.35E-1	2.81E+0	2.06E+1	1.02E-1	1.57E-1	4.03E-3	-5.67E+0	1.52E+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	2.29E-2	1.41E-5	3.27E-4	2.32E-2	1.07E-5	6.67E-5	4.12E-6	-6.52E-3	1.68E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.55E-4	3.18E-7	1.64E-6	6.57E-4	2.43E-7	3.00E-7	5.36E-9	-3.08E-4	3.50E-4
NHWD	kg	3.28E-1	7.67E-3	7.60E-3	3.44E-1	5.89E-3	5.78E-3	2.36E-2	-1.07E-1	2.71E-1
RWD	kg	3.74E-5	8.53E-7	1.24E-6	3.95E-5	6.46E-7	6.36E-7	2.46E-8	-1.40E-5	2.68E-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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