

Environmental Profile

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

Ecochain v3.5.71



Product: 3031708 - Hep20 Brass Adapter 28x1 PF/TF 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	1.15E+0	7.90E-3	9.32E-2	1.25E+0	5.80E-3	3.07E-2	4.65E-4	-3.49E-1	9.34E-1
GWP-f	kg CO2 eq	1.14E+0	7.90E-3	8.56E-2	1.24E+0	5.79E-3	3.09E-2	4.65E-4	-3.45E-1	9.29E-1
GWP-b	kg CO2 eq	8.30E-4	4.68E-6	7.63E-3	8.46E-3	3.52E-6	-2.14E-4	5.65E-7	-4.16E-3	4.09E-3
GWP-luluc	kg CO2 eq	1.33E-3	2.83E-6	2.07E-5	1.36E-3	2.05E-6	8.49E-6	3.49E-8	-3.94E-4	9.75E-4
ODP	kg CFC11 eq	5.80E-8	1.82E-9	1.07E-8	7.04E-8	1.33E-9	1.23E-9	5.10E-11	-1.65E-8	5.65E-8
AP	mol H+ eq	7.72E-2	4.86E-5	1.55E-4	7.74E-2	3.30E-5	6.88E-5	1.19E-6	-6.21E-3	7.13E-2
EP-fw	kg P eq	6.13E-4	6.44E-8	4.95E-7	6.14E-4	4.77E-8	3.68E-7	1.44E-9	-5.00E-5	5.64E-4
EP-m	kg N eq	4.10E-3	1.69E-5	3.88E-5	4.15E-3	1.18E-5	1.75E-5	7.94E-7	-7.55E-4	3.43E-3
EP-T	mol N eq	5.92E-2	1.87E-4	3.51E-4	5.98E-2	1.30E-4	1.97E-4	4.57E-6	-1.02E-2	4.99E-2
POCP	kg NMVOC eq	1.59E-2	5.30E-5	1.16E-4	1.61E-2	3.72E-5	5.73E-5	1.40E-6	-2.46E-3	1.37E-2
ADP-mm	kg Sb eq	4.87E-3	2.02E-7	5.27E-7	4.87E-3	1.50E-7	2.90E-7	1.15E-9	-2.27E-3	2.60E-3
ADP-f	MJ	1.32E+1	1.21E-1	1.24E+0	1.46E+1	8.89E-2	1.32E-1	3.52E-3	-4.44E+0	1.04E+1
WDP	m3 depriv.	8.15E-1	3.68E-4	1.04E-2	8.26E-1	2.73E-4	1.70E-3	1.28E-4	-2.29E-1	5.99E-1
PM	disease inc.	1.79E-7	7.05E-10	1.14E-9	1.81E-7	5.23E-10	1.01E-9	2.33E-11	-2.54E-8	1.57E-7
IR	kBq U-235 eq	4.09E-2	5.28E-4	9.62E-4	4.23E-2	3.89E-4	4.94E-4	1.50E-5	-1.62E-2	2.70E-2
ETP-fw	CTUe	7.54E+2	9.78E-2	7.22E-1	7.54E+2	7.22E-2	3.44E-1	3.36E-3	-1.06E+2	6.48E+2
HTP-c	CTUh	1.10E-8	3.51E-12	3.12E-11	1.10E-8	2.57E-12	1.70E-11	6.12E-14	-2.39E-9	8.64E-9
HTP-nc	CTUh	8.82E-7	1.16E-10	6.21E-10	8.83E-7	8.61E-11	3.83E-10	1.91E-12	-1.52E-7	7.31E-7
SQP	Pt	1.18E+1	1.02E-1	1.10E-1	1.20E+1	7.61E-2	1.63E-1	7.70E-3	-2.13E+0	1.01E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.47E+0	1.72E-3	1.17E+0	3.64E+0	1.28E-3	1.13E-2	5.65E-5	-6.40E-1	3.01E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.47E+0	1.72E-3	1.17E+0	3.64E+0	1.28E-3	1.13E-2	5.65E-5	-6.40E-1	3.01E+0
PENRE	MJ	1.41E+1	1.28E-1	1.37E+0	1.56E+1	9.44E-2	1.41E-1	3.74E-3	-4.76E+0	1.11E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.41E+1	1.28E-1	1.37E+0	1.56E+1	9.44E-2	1.41E-1	3.74E-3	-4.76E+0	1.11E+1
PET	MJ	1.66E+1	1.30E-1	2.54E+0	1.93E+1	9.57E-2	1.52E-1	3.79E-3	-5.40E+0	1.41E+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	2.14E-2	1.36E-5	2.95E-4	2.17E-2	1.01E-5	6.58E-5	3.89E-6	-6.11E-3	1.56E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.07E-4	3.06E-7	1.47E-6	6.09E-4	2.27E-7	2.88E-7	5.03E-9	-2.85E-4	3.24E-4
NHWD	kg	3.05E-1	7.39E-3	6.82E-3	3.19E-1	5.51E-3	5.64E-3	2.21E-2	-9.97E-2	2.53E-1
RWD	kg	3.47E-5	8.22E-7	1.11E-6	3.67E-5	6.05E-7	6.11E-7	2.31E-8	-1.29E-5	2.50E-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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