

Environmental Profile

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

Ecochain v3.5.71



Product: 3031355 - Hep20 Brass Adapter 22x3/4 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	7.03E-1	5.03E-3	5.87E-2	7.66E-1	3.50E-3	2.20E-2	3.11E-4	-2.19E-1	5.74E-1
GWP-f	kg CO2 eq	7.01E-1	5.03E-3	5.40E-2	7.60E-1	3.50E-3	2.21E-2	3.10E-4	-2.16E-1	5.70E-1
GWP-b	kg CO2 eq	4.99E-4	2.98E-6	4.76E-3	5.26E-3	2.13E-6	-1.29E-4	3.70E-7	-2.48E-3	2.65E-3
GWP-luluc	kg CO2 eq	7.93E-4	1.80E-6	1.36E-5	8.09E-4	1.24E-6	5.39E-6	2.13E-8	-2.34E-4	5.82E-4
ODP	kg CFC11 eq	3.50E-8	1.16E-9	6.67E-9	4.28E-8	8.07E-10	7.84E-10	3.12E-11	-9.96E-9	3.45E-8
AP	mol H+ eq	4.58E-2	3.11E-5	1.00E-4	4.60E-2	1.99E-5	4.31E-5	7.30E-7	-3.72E-3	4.23E-2
EP-fw	kg P eq	3.64E-4	4.10E-8	3.17E-7	3.64E-4	2.88E-8	2.29E-7	8.86E-10	-2.98E-5	3.34E-4
EP-m	kg N eq	2.45E-3	1.08E-5	2.47E-5	2.48E-3	7.14E-6	1.11E-5	5.15E-7	-4.56E-4	2.05E-3
EP-T	mol N eq	3.53E-2	1.19E-4	2.25E-4	3.57E-2	7.86E-5	1.24E-4	2.80E-6	-6.15E-3	2.97E-2
POCP	kg NMVOC eq	9.50E-3	3.38E-5	7.42E-5	9.61E-3	2.25E-5	3.62E-5	8.63E-7	-1.49E-3	8.18E-3
ADP-mm	kg Sb eq	2.89E-3	1.28E-7	3.50E-7	2.89E-3	9.06E-8	1.79E-7	7.06E-10	-1.35E-3	1.54E-3
ADP-f	MJ	8.15E+0	7.70E-2	7.82E-1	9.01E+0	5.38E-2	8.47E-2	2.15E-3	-2.77E+0	6.38E+0
WDP	m3 depriv.	4.92E-1	2.34E-4	6.63E-3	4.98E-1	1.65E-4	1.16E-3	7.62E-5	-1.39E-1	3.61E-1
PM	disease inc.	1.07E-7	4.49E-10	7.37E-10	1.08E-7	3.16E-10	6.29E-10	1.43E-11	-1.54E-8	9.39E-8
IR	kBq U-235 eq	2.44E-2	3.36E-4	6.10E-4	2.54E-2	2.35E-4	3.12E-4	9.20E-6	-9.63E-3	1.63E-2
ETP-fw	CTUe	4.47E+2	6.23E-2	4.73E-1	4.47E+2	4.36E-2	2.17E-1	2.14E-3	-6.31E+1	3.84E+2
HTP-c	CTUh	6.51E-9	2.24E-12	2.03E-11	6.54E-9	1.55E-12	1.09E-11	3.81E-14	-1.42E-9	5.13E-9
HTP-nc	CTUh	5.23E-7	7.40E-11	4.07E-10	5.23E-7	5.20E-11	2.39E-10	1.19E-12	-9.02E-8	4.33E-7
SQP	Pt	7.00E+0	6.50E-2	7.16E-2	7.13E+0	4.60E-2	1.02E-1	4.74E-3	-1.26E+0	6.02E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.47E+0	1.09E-3	7.82E-1	2.25E+0	7.71E-4	7.01E-3	3.67E-5	-3.80E-1	1.88E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.47E+0	1.09E-3	7.82E-1	2.25E+0	7.71E-4	7.01E-3	3.67E-5	-3.80E-1	1.88E+0
PENRE	MJ	8.72E+0	8.17E-2	8.61E-1	9.66E+0	5.71E-2	9.01E-2	2.29E-3	-2.97E+0	6.84E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.72E+0	8.17E-2	8.61E-1	9.66E+0	5.71E-2	9.01E-2	2.29E-3	-2.97E+0	6.84E+0
PET	MJ	1.02E+1	8.28E-2	1.64E+0	1.19E+1	5.78E-2	9.71E-2	2.32E-3	-3.35E+0	8.72E+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	1.29E-2	8.63E-6	1.89E-4	1.31E-2	6.08E-6	4.55E-5	2.39E-6	-3.69E-3	9.41E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.60E-4	1.95E-7	9.16E-7	3.61E-4	1.37E-7	1.82E-7	3.07E-9	-1.69E-4	1.92E-4
NHWD	kg	1.82E-1	4.70E-3	4.26E-3	1.91E-1	3.33E-3	3.68E-3	1.34E-2	-5.92E-2	1.52E-1
RWD	kg	2.09E-5	5.24E-7	6.92E-7	2.21E-5	3.66E-7	3.86E-7	1.42E-8	-7.69E-6	1.52E-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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