

Environmental Profile

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

Ecochain v3.5.71



Product: 3029604 - Hep20 Pb Straight Tap Conn WT 15x1/2"
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	3.50E-1	2.39E-3	2.31E-2	3.75E-1	6.46E-4	3.63E-2	2.98E-4	-1.37E-1	2.75E-1
GWP-f	kg CO2 eq	3.52E-1	2.38E-3	2.14E-2	3.76E-1	6.46E-4	2.60E-2	2.98E-4	-1.39E-1	2.64E-1
GWP-b	kg CO2 eq	-2.69E-3	1.41E-6	1.66E-3	-1.02E-3	3.92E-7	1.02E-2	2.96E-7	1.74E-3	1.10E-2
GWP-luluc	kg CO2 eq	1.48E-4	8.57E-7	7.95E-6	1.57E-4	2.29E-7	2.77E-6	6.05E-9	-2.02E-5	1.40E-4
ODP	kg CFC11 eq	1.23E-8	5.48E-10	2.46E-9	1.53E-8	1.49E-10	7.89E-10	8.13E-12	-2.02E-9	1.43E-8
AP	mol H+ eq	1.82E-3	1.49E-5	5.12E-5	1.89E-3	3.68E-6	3.14E-5	2.03E-7	-5.07E-4	1.41E-3
EP-fw	kg P eq	1.16E-5	1.94E-8	1.50E-7	1.18E-5	5.31E-9	1.31E-7	2.74E-10	-2.42E-6	9.53E-6
EP-m	kg N eq	3.97E-4	5.16E-6	1.10E-5	4.13E-4	1.32E-6	9.41E-6	3.69E-7	-1.12E-4	3.12E-4
EP-T	mol N eq	3.43E-3	5.70E-5	1.06E-4	3.59E-3	1.45E-5	1.04E-4	8.04E-7	-1.15E-3	2.56E-3
POCP	kg NMVOC eq	1.11E-3	1.62E-5	3.43E-5	1.16E-3	4.15E-6	2.98E-5	2.92E-7	-4.58E-4	7.34E-4
ADP-mm	kg Sb eq	9.21E-6	6.07E-8	2.15E-7	9.49E-6	1.67E-8	1.30E-7	2.00E-10	-8.33E-7	8.80E-6
ADP-f	MJ	4.57E+0	3.65E-2	3.02E-1	4.91E+0	9.91E-3	7.68E-2	5.99E-4	-1.57E+0	3.43E+0
WDP	m3 depriv.	1.80E-1	1.11E-4	2.95E-3	1.83E-1	3.04E-5	1.36E-3	3.73E-6	-4.31E-2	1.41E-1
PM	disease inc.	1.87E-8	2.12E-10	3.75E-10	1.93E-8	5.83E-11	4.40E-10	4.09E-12	-5.49E-9	1.43E-8
IR	kBq U-235 eq	6.78E-3	1.59E-4	2.56E-4	7.20E-3	4.33E-5	2.73E-4	2.87E-6	-5.02E-6	7.51E-3
ETP-fw	CTUe	5.41E+0	2.95E-2	2.63E-1	5.70E+0	8.05E-3	1.44E-1	1.23E-3	-1.26E+0	4.59E+0
HTP-c	CTUh	1.82E-9	1.06E-12	1.09E-11	1.83E-9	2.86E-13	9.47E-12	1.65E-14	-1.54E-11	1.82E-9
HTP-nc	CTUh	6.12E-9	3.50E-11	2.30E-10	6.39E-9	9.60E-12	1.62E-10	5.06E-13	4.21E-9	1.08E-8
SQP	Pt	1.43E+0	3.08E-2	3.71E-2	1.50E+0	8.48E-3	-2.20E-1	1.52E-3	-9.99E-1	2.90E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.85E-1	5.18E-4	5.09E-1	9.95E-1	1.42E-4	-3.83E-2	2.70E-5	-1.76E-1	7.81E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.85E-1	5.18E-4	5.09E-1	9.95E-1	1.42E-4	-3.83E-2	2.70E-5	-1.76E-1	7.81E-1
PENRE	MJ	4.90E+0	3.87E-2	3.32E-1	5.27E+0	1.05E-2	8.17E-2	6.36E-4	-1.69E+0	3.67E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.90E+0	3.87E-2	3.32E-1	5.27E+0	1.05E-2	8.17E-2	6.36E-4	-1.69E+0	3.67E+0
PET	MJ	5.39E+0	3.92E-2	8.41E-1	6.27E+0	1.07E-2	4.33E-2	6.63E-4	-1.87E+0	4.45E+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	4.55E-3	4.09E-6	8.81E-5	4.64E-3	1.12E-6	4.95E-5	7.42E-7	-1.01E-3	3.69E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.55E-6	9.22E-8	3.21E-7	3.97E-6	2.54E-8	1.51E-7	7.23E-10	-3.05E-6	1.10E-6
NHWD	kg	1.38E-1	2.22E-3	1.50E-3	1.42E-1	6.15E-4	4.37E-3	2.60E-3	-3.65E-3	1.46E-1
RWD	kg	6.73E-6	2.48E-7	2.43E-7	7.22E-6	6.74E-8	3.61E-7	3.94E-9	-2.75E-7	7.38E-6
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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