

Environmental Profile

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

Ecochain v3.5.71



Product: 3030718 - Hep20 Pb Tee Reduced Both End W 10x10x15
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	2.96E-1	4.46E-3	2.17E-2	3.23E-1	1.00E-3	4.17E-2	4.69E-4	-1.48E-1	2.17E-1
GWP-f	kg CO2 eq	2.96E-1	4.46E-3	2.04E-2	3.21E-1	1.00E-3	4.17E-2	4.69E-4	-1.48E-1	2.16E-1
GWP-b	kg CO2 eq	4.04E-4	2.58E-6	1.29E-3	1.70E-3	6.09E-7	-3.55E-5	4.71E-7	-2.94E-4	1.37E-3
GWP-luluc	kg CO2 eq	2.18E-5	1.62E-6	1.09E-5	3.43E-5	3.55E-7	5.55E-6	9.13E-9	-1.06E-6	3.92E-5
ODP	kg CFC11 eq	5.41E-9	1.02E-9	2.09E-9	8.52E-9	2.31E-10	8.13E-10	1.28E-11	-1.84E-9	7.74E-9
AP	mol H+ eq	1.38E-3	2.97E-5	6.36E-5	1.47E-3	5.71E-6	3.29E-5	3.17E-7	-5.42E-4	9.67E-4
EP-fw	kg P eq	3.64E-6	3.60E-8	1.73E-7	3.85E-6	8.25E-9	1.64E-7	4.20E-10	-1.28E-6	2.75E-6
EP-m	kg N eq	2.51E-4	1.01E-5	1.19E-5	2.73E-4	2.04E-6	9.91E-6	6.01E-7	-1.13E-4	1.72E-4
EP-T	mol N eq	2.56E-3	1.11E-4	1.22E-4	2.79E-3	2.25E-5	1.08E-4	1.26E-6	-1.14E-3	1.78E-3
POCP	kg NMVOC eq	9.70E-4	3.13E-5	3.89E-5	1.04E-3	6.44E-6	3.30E-5	4.60E-7	-4.29E-4	6.51E-4
ADP-mm	kg Sb eq	8.93E-6	1.12E-7	3.05E-7	9.34E-6	2.59E-8	1.20E-7	3.10E-10	-9.51E-7	8.54E-6
ADP-f	MJ	4.14E+0	6.80E-2	2.77E-1	4.49E+0	1.54E-2	9.54E-2	9.42E-4	-2.02E+0	2.58E+0
WDP	m3 depriv.	9.43E-2	2.05E-4	3.24E-3	9.78E-2	4.72E-5	2.13E-3	4.35E-6	-3.62E-2	6.38E-2
PM	disease inc.	1.20E-8	3.93E-10	4.66E-10	1.28E-8	9.05E-11	4.92E-10	6.42E-12	-4.93E-9	8.49E-9
IR	kBq U-235 eq	2.02E-3	2.97E-4	2.63E-4	2.58E-3	6.72E-5	2.89E-4	4.55E-6	-1.38E-4	2.80E-3
ETP-fw	CTUe	8.69E-1	5.49E-2	3.50E-1	1.27E+0	1.25E-2	1.69E-1	1.99E-3	-1.12E-1	1.34E+0
HTP-c	CTUh	6.53E-11	1.99E-12	1.42E-11	8.14E-11	4.45E-13	1.31E-11	2.50E-14	-1.19E-11	8.31E-11
HTP-nc	CTUh	1.06E-9	6.49E-11	3.08E-10	1.43E-9	1.49E-11	1.77E-10	8.01E-13	-2.52E-10	1.38E-9
SQP	Pt	2.32E-1	5.67E-2	4.67E-2	3.35E-1	1.32E-2	7.41E-2	2.39E-3	-1.24E-2	4.12E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.19E-2	9.60E-4	7.46E-1	7.98E-1	2.21E-4	4.83E-3	4.35E-5	-9.84E-3	7.94E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.19E-2	9.60E-4	7.46E-1	7.98E-1	2.21E-4	4.83E-3	4.35E-5	-9.84E-3	7.94E-1
PENRE	MJ	4.46E+0	7.22E-2	3.03E-1	4.84E+0	1.63E-2	1.02E-1	9.99E-4	-2.18E+0	2.78E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.46E+0	7.22E-2	3.03E-1	4.84E+0	1.63E-2	1.02E-1	9.99E-4	-2.18E+0	2.78E+0
PET	MJ	4.52E+0	7.32E-2	1.05E+0	5.64E+0	1.66E-2	1.06E-1	1.04E-3	-2.19E+0	3.57E+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	2.25E-3	7.57E-6	1.01E-4	2.36E-3	1.74E-6	7.74E-5	1.17E-6	-8.47E-4	1.59E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.22E-7	1.71E-7	2.52E-7	1.04E-6	3.93E-8	1.67E-7	1.12E-9	-3.34E-7	9.18E-7
NHWD	kg	1.34E-2	4.10E-3	1.18E-3	1.87E-2	9.54E-4	4.88E-3	4.10E-3	-1.30E-3	2.73E-2
RWD	kg	2.56E-6	4.63E-7	1.90E-7	3.21E-6	1.05E-7	3.62E-7	6.21E-9	-1.84E-7	3.50E-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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