

Environmental Profile

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

Ecochain v3.5.71



Product: 3030719 - Hep20 Pb Tee Reduced Both End W 15x15x22
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	5.00E-1	7.68E-3	3.49E-2	5.42E-1	1.69E-3	6.06E-2	7.66E-4	-2.51E-1	3.54E-1
GWP-f	kg CO2 eq	4.99E-1	7.68E-3	3.25E-2	5.39E-1	1.69E-3	6.06E-2	7.66E-4	-2.51E-1	3.51E-1
GWP-b	kg CO2 eq	9.28E-4	4.43E-6	2.38E-3	3.31E-3	1.02E-6	-6.26E-5	7.70E-7	-5.18E-4	2.74E-3
GWP-luluc	kg CO2 eq	2.82E-5	2.79E-6	1.36E-5	4.46E-5	5.97E-7	9.58E-6	1.49E-8	-1.42E-6	5.34E-5
ODP	kg CFC11 eq	6.46E-9	1.76E-9	3.60E-9	1.18E-8	3.89E-10	1.38E-9	2.09E-11	-2.63E-9	1.10E-8
AP	mol H+ eq	2.32E-3	5.12E-5	8.44E-5	2.46E-3	9.61E-6	5.53E-5	5.19E-7	-9.35E-4	1.59E-3
EP-fw	kg P eq	5.85E-6	6.20E-8	2.41E-7	6.15E-6	1.39E-8	2.81E-7	6.86E-10	-2.16E-6	4.29E-6
EP-m	kg N eq	4.22E-4	1.73E-5	1.73E-5	4.57E-4	3.44E-6	1.65E-5	9.82E-7	-1.94E-4	2.84E-4
EP-T	mol N eq	4.29E-3	1.91E-4	1.70E-4	4.65E-3	3.79E-5	1.81E-4	2.06E-6	-1.95E-3	2.93E-3
POCP	kg NMVOC eq	1.63E-3	5.40E-5	5.48E-5	1.73E-3	1.08E-5	5.55E-5	7.51E-7	-7.39E-4	1.06E-3
ADP-mm	kg Sb eq	1.09E-5	1.93E-7	3.73E-7	1.14E-5	4.36E-8	2.06E-7	5.07E-10	-1.47E-6	1.02E-5
ADP-f	MJ	6.86E+0	1.17E-1	4.53E-1	7.43E+0	2.59E-2	1.64E-1	1.54E-3	-3.42E+0	4.20E+0
WDP	m3 depriv.	1.55E-1	3.53E-4	4.67E-3	1.60E-1	7.95E-5	3.56E-3	7.12E-6	-6.17E-2	1.02E-1
PM	disease inc.	1.99E-8	6.77E-10	6.18E-10	2.12E-8	1.52E-10	8.46E-10	1.05E-11	-8.51E-9	1.37E-8
IR	kBq U-235 eq	2.44E-3	5.12E-4	3.97E-4	3.35E-3	1.13E-4	4.97E-4	7.43E-6	-1.79E-4	3.79E-3
ETP-fw	CTUe	1.25E+0	9.45E-2	4.44E-1	1.78E+0	2.10E-2	2.74E-1	3.25E-3	-1.80E-1	1.90E+0
HTP-c	CTUh	1.07E-10	3.43E-12	1.83E-11	1.29E-10	7.48E-13	2.26E-11	4.08E-14	-2.00E-11	1.32E-10
HTP-nc	CTUh	1.69E-9	1.12E-10	3.90E-10	2.19E-9	2.51E-11	2.99E-10	1.31E-12	-4.27E-10	2.09E-9
SQP	Pt	3.35E-1	9.77E-2	6.15E-2	4.94E-1	2.21E-2	1.28E-1	3.91E-3	-1.72E-2	6.31E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.64E-2	1.65E-3	8.92E-1	9.70E-1	3.71E-4	8.30E-3	7.11E-5	-1.64E-2	9.62E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.64E-2	1.65E-3	8.92E-1	9.70E-1	3.71E-4	8.30E-3	7.11E-5	-1.64E-2	9.62E-1
PENRE	MJ	7.39E+0	1.24E-1	4.96E-1	8.01E+0	2.75E-2	1.74E-1	1.63E-3	-3.70E+0	4.51E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.39E+0	1.24E-1	4.96E-1	8.01E+0	2.75E-2	1.74E-1	1.63E-3	-3.70E+0	4.51E+0
PET	MJ	7.47E+0	1.26E-1	1.39E+0	8.98E+0	2.79E-2	1.83E-1	1.70E-3	-3.72E+0	5.48E+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	3.68E-3	1.30E-5	1.41E-4	3.83E-3	2.93E-6	1.19E-4	1.92E-6	-1.44E-3	2.51E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.92E-7	2.94E-7	4.61E-7	1.65E-6	6.62E-8	2.81E-7	1.84E-9	-4.84E-7	1.51E-6
NHWD	kg	2.23E-2	7.05E-3	2.15E-3	3.15E-2	1.60E-3	8.18E-3	6.71E-3	-2.19E-3	4.58E-2
RWD	kg	3.01E-6	7.97E-7	3.49E-7	4.16E-6	1.76E-7	6.22E-7	1.02E-8	-2.39E-7	4.73E-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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