

Environmental Profile

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

Ecochain v3.5.71



Product: 3029592 - Hep20 Pb Equal Tee WT 10
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	2.36E-1	3.52E-3	1.91E-2	2.59E-1	7.92E-4	4.12E-2	3.77E-4	-1.18E-1	1.84E-1
GWP-f	kg CO2 eq	2.38E-1	3.52E-3	1.80E-2	2.60E-1	7.92E-4	3.58E-2	3.77E-4	-1.19E-1	1.78E-1
GWP-b	kg CO2 eq	-1.93E-3	2.04E-6	1.07E-3	-8.53E-4	4.81E-7	5.35E-3	3.79E-7	1.15E-3	5.64E-3
GWP-luluc	kg CO2 eq	3.87E-5	1.28E-6	1.04E-5	5.04E-5	2.80E-7	3.45E-6	7.35E-9	-2.30E-5	3.11E-5
ODP	kg CFC11 eq	5.51E-9	8.08E-10	1.79E-9	8.11E-9	1.82E-10	6.49E-10	1.03E-11	-1.83E-9	7.12E-9
AP	mol H+ eq	1.11E-3	2.34E-5	5.94E-5	1.19E-3	4.51E-6	2.58E-5	2.55E-7	-4.38E-4	7.85E-4
EP-fw	kg P eq	3.20E-6	2.84E-8	1.60E-7	3.39E-6	6.51E-9	1.18E-7	3.38E-10	-1.29E-6	2.23E-6
EP-m	kg N eq	2.06E-4	7.92E-6	1.09E-5	2.24E-4	1.61E-6	7.98E-6	4.83E-7	-9.24E-5	1.42E-4
EP-T	mol N eq	2.09E-3	8.74E-5	1.13E-4	2.29E-3	1.78E-5	8.71E-5	1.02E-6	-9.34E-4	1.47E-3
POCP	kg NMVOC eq	7.84E-4	2.47E-5	3.57E-5	8.45E-4	5.08E-6	2.59E-5	3.70E-7	-3.45E-4	5.31E-4
ADP-mm	kg Sb eq	8.47E-6	8.88E-8	2.92E-7	8.85E-6	2.05E-8	9.49E-8	2.50E-10	-8.18E-7	8.15E-6
ADP-f	MJ	3.36E+0	5.37E-2	2.42E-1	3.66E+0	1.22E-2	7.25E-2	7.58E-4	-1.61E+0	2.13E+0
WDP	m3 depriv.	7.75E-2	1.62E-4	2.95E-3	8.06E-2	3.73E-5	1.64E-3	3.51E-6	-3.31E-2	4.92E-2
PM	disease inc.	9.86E-9	3.11E-10	4.35E-10	1.06E-8	7.15E-11	3.70E-10	5.17E-12	-4.15E-9	6.91E-9
IR	kBq U-235 eq	2.05E-3	2.35E-4	2.36E-4	2.52E-3	5.31E-5	2.25E-4	3.66E-6	-3.20E-4	2.48E-3
ETP-fw	CTUe	1.16E+0	4.34E-2	3.31E-1	1.53E+0	9.87E-3	1.36E-1	1.60E-3	-3.31E-1	1.35E+0
HTP-c	CTUh	5.54E-11	1.57E-12	1.34E-11	7.03E-11	3.51E-13	9.86E-12	2.01E-14	-1.13E-11	6.93E-11
HTP-nc	CTUh	9.28E-10	5.13E-11	2.92E-10	1.27E-9	1.18E-11	1.39E-10	6.45E-13	-2.63E-10	1.16E-9
SQP	Pt	5.16E-1	4.49E-2	4.38E-2	6.05E-1	1.04E-2	-8.91E-2	1.93E-3	-5.83E-1	-5.50E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.75E-2	7.58E-4	7.16E-1	8.15E-1	1.74E-4	-1.77E-2	3.50E-5	-1.12E-1	6.85E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.75E-2	7.58E-4	7.16E-1	8.15E-1	1.74E-4	-1.77E-2	3.50E-5	-1.12E-1	6.85E-1
PENRE	MJ	3.62E+0	5.71E-2	2.64E-1	3.94E+0	1.29E-2	7.72E-2	8.04E-4	-1.75E+0	2.28E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.62E+0	5.71E-2	2.64E-1	3.94E+0	1.29E-2	7.72E-2	8.04E-4	-1.75E+0	2.28E+0
PET	MJ	3.72E+0	5.78E-2	9.81E-1	4.76E+0	1.31E-2	5.96E-2	8.39E-4	-1.86E+0	2.97E+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	1.87E-3	5.98E-6	9.31E-5	1.97E-3	1.38E-6	6.33E-5	9.44E-7	-7.88E-4	1.25E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.28E-7	1.35E-7	2.10E-7	9.73E-7	3.11E-8	1.29E-7	9.04E-10	-3.28E-7	8.06E-7
NHWD	kg	1.15E-2	3.24E-3	9.86E-4	1.57E-2	7.53E-4	3.91E-3	3.30E-3	-1.28E-3	2.24E-2
RWD	kg	2.59E-6	3.66E-7	1.59E-7	3.11E-6	8.26E-8	2.85E-7	5.00E-9	-3.52E-7	3.13E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777