

Environmental Profile

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

Ecochain v3.5.71



Product: 3029594 - Hep20 Pb Equal Tee WT 22
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	6.93E-1	1.09E-2	4.80E-2	7.52E-1	2.35E-3	1.01E-1	1.05E-3	-3.48E-1	5.08E-1
GWP-f	kg CO2 eq	7.00E-1	1.09E-2	4.45E-2	7.56E-1	2.34E-3	7.87E-2	1.05E-3	-3.54E-1	4.84E-1
GWP-b	kg CO2 eq	-7.25E-3	6.29E-6	3.47E-3	-3.77E-3	1.42E-6	2.19E-2	1.06E-6	5.81E-3	2.39E-2
GWP-luluc	kg CO2 eq	1.15E-4	3.96E-6	1.63E-5	1.35E-4	8.30E-7	1.00E-5	2.05E-8	-9.72E-5	4.91E-5
ODP	kg CFC11 eq	9.25E-9	2.50E-9	5.12E-9	1.69E-8	5.40E-10	2.00E-9	2.87E-11	-4.38E-9	1.50E-8
AP	mol H+ eq	3.29E-3	7.25E-5	1.05E-4	3.46E-3	1.34E-5	7.67E-5	7.12E-7	-1.37E-3	2.19E-3
EP-fw	kg P eq	8.74E-6	8.79E-8	3.08E-7	9.14E-6	1.93E-8	3.57E-7	9.42E-10	-4.13E-6	5.38E-6
EP-m	kg N eq	6.05E-4	2.46E-5	2.26E-5	6.53E-4	4.78E-6	2.36E-5	1.35E-6	-2.83E-4	3.99E-4
EP-T	mol N eq	6.14E-3	2.71E-4	2.18E-4	6.63E-3	5.27E-5	2.57E-4	2.83E-6	-2.87E-3	4.07E-3
POCP	kg NMVOC eq	2.30E-3	7.65E-5	7.06E-5	2.45E-3	1.51E-5	7.71E-5	1.03E-6	-1.07E-3	1.47E-3
ADP-mm	kg Sb eq	1.28E-5	2.74E-7	4.40E-7	1.35E-5	6.07E-8	2.98E-7	6.96E-10	-2.03E-6	1.19E-5
ADP-f	MJ	9.64E+0	1.66E-1	6.28E-1	1.04E+1	3.60E-2	2.23E-1	2.11E-3	-4.88E+0	5.82E+0
WDP	m3 depriv.	2.14E-1	5.01E-4	6.10E-3	2.21E-1	1.10E-4	4.73E-3	9.77E-6	-1.04E-1	1.22E-1
PM	disease inc.	2.86E-8	9.60E-10	7.71E-10	3.03E-8	2.12E-10	1.14E-9	1.44E-11	-1.32E-8	1.85E-8
IR	kBq U-235 eq	3.49E-3	7.26E-4	5.30E-4	4.75E-3	1.57E-4	7.00E-4	1.02E-5	-1.06E-3	4.56E-3
ETP-fw	CTUe	3.33E+0	1.34E-1	5.39E-1	4.00E+0	2.92E-2	3.73E-1	4.46E-3	-1.28E+0	3.13E+0
HTP-c	CTUh	1.58E-10	4.86E-12	2.24E-11	1.85E-10	1.04E-12	3.07E-11	5.60E-14	-3.55E-11	1.81E-10
HTP-nc	CTUh	2.50E-9	1.58E-10	4.71E-10	3.13E-9	3.48E-11	4.15E-10	1.80E-12	-8.60E-10	2.72E-9
SQP	Pt	1.72E+0	1.39E-1	7.62E-2	1.94E+0	3.08E-2	-4.07E-1	5.37E-3	-2.50E+0	-9.30E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.21E-1	2.34E-3	1.04E+0	1.36E+0	5.16E-4	-7.40E-2	9.76E-5	-4.74E-1	8.15E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.21E-1	2.34E-3	1.04E+0	1.36E+0	5.16E-4	-7.40E-2	9.76E-5	-4.74E-1	8.15E-1
PENRE	MJ	1.04E+1	1.76E-1	6.89E-1	1.13E+1	3.82E-2	2.37E-1	2.24E-3	-5.28E+0	6.26E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.04E+1	1.76E-1	6.89E-1	1.13E+1	3.82E-2	2.37E-1	2.24E-3	-5.28E+0	6.26E+0
PET	MJ	1.07E+1	1.79E-1	1.73E+0	1.26E+1	3.87E-2	1.63E-1	2.34E-3	-5.75E+0	7.07E+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	5.15E-3	1.85E-5	1.82E-4	5.35E-3	4.07E-6	1.54E-4	2.63E-6	-2.49E-3	3.03E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.47E-6	4.17E-7	6.71E-7	2.55E-6	9.20E-8	3.78E-7	2.52E-9	-7.99E-7	2.23E-6
NHWD	kg	3.35E-2	1.00E-2	3.13E-3	4.66E-2	2.23E-3	1.16E-2	9.21E-3	-4.10E-3	6.55E-2
RWD	kg	4.13E-6	1.13E-6	5.07E-7	5.77E-6	2.45E-7	8.91E-7	1.39E-8	-1.09E-6	5.83E-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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