

Environmental Profile

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

Ecochain v3.5.71



Product: 3030675 - Hep20 Pb Equal Tee WT 28
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	1.09E+0	1.72E-2	7.33E-2	1.18E+0	3.72E-3	1.50E-1	1.65E-3	-5.49E-1	7.89E-1
GWP-f	kg CO2 eq	1.10E+0	1.72E-2	6.77E-2	1.19E+0	3.71E-3	1.17E-1	1.65E-3	-5.58E-1	7.52E-1
GWP-b	kg CO2 eq	-1.05E-2	9.91E-6	5.58E-3	-4.95E-3	2.25E-6	3.30E-2	1.65E-6	9.16E-3	3.72E-2
GWP-luluc	kg CO2 eq	1.71E-4	6.24E-6	2.14E-5	1.99E-4	1.31E-6	1.64E-5	3.21E-8	-1.49E-4	6.74E-5
ODP	kg CFC11 eq	1.23E-8	3.94E-9	8.04E-9	2.43E-8	8.56E-10	3.18E-9	4.50E-11	-6.50E-9	2.18E-8
AP	mol H+ eq	5.19E-3	1.15E-4	1.45E-4	5.45E-3	2.12E-5	1.22E-4	1.11E-6	-2.18E-3	3.41E-3
EP-fw	kg P eq	1.34E-5	1.39E-7	4.38E-7	1.40E-5	3.06E-8	5.75E-7	1.47E-9	-6.44E-6	8.17E-6
EP-m	kg N eq	9.51E-4	3.88E-5	3.30E-5	1.02E-3	7.57E-6	3.73E-5	2.11E-6	-4.47E-4	6.23E-4
EP-T	mol N eq	9.65E-3	4.28E-4	3.10E-4	1.04E-2	8.34E-5	4.06E-4	4.44E-6	-4.54E-3	6.34E-3
POCP	kg NMVOC eq	3.62E-3	1.21E-4	1.01E-4	3.85E-3	2.38E-5	1.22E-4	1.61E-6	-1.71E-3	2.29E-3
ADP-mm	kg Sb eq	1.66E-5	4.32E-7	5.70E-7	1.76E-5	9.61E-8	4.75E-7	1.09E-9	-3.06E-6	1.51E-5
ADP-f	MJ	1.51E+1	2.62E-1	9.67E-1	1.64E+1	5.70E-2	3.57E-1	3.31E-3	-7.73E+0	9.05E+0
WDP	m3 depriv.	3.32E-1	7.90E-4	8.87E-3	3.42E-1	1.75E-4	7.48E-3	1.53E-5	-1.63E-1	1.87E-1
PM	disease inc.	4.48E-8	1.51E-9	1.07E-9	4.74E-8	3.35E-10	1.83E-9	2.26E-11	-2.09E-8	2.87E-8
IR	kBq U-235 eq	4.67E-3	1.14E-3	7.89E-4	6.61E-3	2.49E-4	1.12E-3	1.60E-5	-1.60E-3	6.39E-3
ETP-fw	CTUe	5.00E+0	2.11E-1	7.23E-1	5.93E+0	4.63E-2	5.82E-1	6.98E-3	-1.97E+0	4.60E+0
HTP-c	CTUh	2.46E-10	7.67E-12	3.04E-11	2.84E-10	1.65E-12	4.92E-11	8.77E-14	-5.55E-11	2.79E-10
HTP-nc	CTUh	3.85E-9	2.50E-10	6.28E-10	4.72E-9	5.52E-11	6.59E-10	2.81E-12	-1.35E-9	4.10E-9
SQP	Pt	2.59E+0	2.18E-1	1.05E-1	2.92E+0	4.88E-2	-5.92E-1	8.40E-3	-3.84E+0	-1.46E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.85E-1	3.69E-3	1.32E+0	1.81E+0	8.18E-4	-1.10E-1	1.53E-4	-7.29E-1	9.72E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.85E-1	3.69E-3	1.32E+0	1.81E+0	8.18E-4	-1.10E-1	1.53E-4	-7.29E-1	9.72E-1
PENRE	MJ	1.63E+1	2.78E-1	1.06E+0	1.77E+1	6.05E-2	3.80E-1	3.51E-3	-8.36E+0	9.74E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.63E+1	2.78E-1	1.06E+0	1.77E+1	6.05E-2	3.80E-1	3.51E-3	-8.36E+0	9.74E+0
PET	MJ	1.68E+1	2.82E-1	2.38E+0	1.95E+1	6.13E-2	2.70E-1	3.66E-3	-9.09E+0	1.07E+1
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	7.98E-3	2.91E-5	2.59E-4	8.27E-3	6.45E-6	2.36E-4	4.12E-6	-3.89E-3	4.62E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.16E-6	6.57E-7	1.08E-6	3.89E-6	1.46E-7	6.00E-7	3.94E-9	-1.19E-6	3.45E-6
NHWD	kg	5.25E-2	1.58E-2	5.01E-3	7.32E-2	3.53E-3	1.83E-2	1.44E-2	-6.43E-3	1.03E-1
RWD	kg	5.40E-6	1.78E-6	8.14E-7	7.99E-6	3.88E-7	1.42E-6	2.18E-8	-1.64E-6	8.19E-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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