

Environmental Profile

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

Ecochain v3.5.71



Product: 3029593 - Hep20 Pb Equal Tee WT 15
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	3.80E-1	5.88E-3	2.79E-2	4.14E-1	1.27E-3	6.01E-2	5.83E-4	-1.89E-1	2.87E-1
GWP-f	kg CO2 eq	3.84E-1	5.87E-3	2.61E-2	4.16E-1	1.27E-3	4.90E-2	5.83E-4	-1.93E-1	2.74E-1
GWP-b	kg CO2 eq	-3.73E-3	3.40E-6	1.80E-3	-1.92E-3	7.68E-7	1.12E-2	5.86E-7	3.42E-3	1.27E-2
GWP-luluc	kg CO2 eq	6.77E-5	2.13E-6	1.22E-5	8.20E-5	4.48E-7	5.41E-6	1.14E-8	-5.26E-5	3.53E-5
ODP	kg CFC11 eq	6.78E-9	1.35E-9	2.80E-9	1.09E-8	2.92E-10	1.07E-9	1.59E-11	-2.68E-9	9.62E-9
AP	mol H+ eq	1.79E-3	3.89E-5	7.33E-5	1.90E-3	7.21E-6	4.16E-5	3.95E-7	-7.31E-4	1.22E-3
EP-fw	kg P eq	5.03E-6	4.74E-8	2.05E-7	5.28E-6	1.04E-8	1.91E-7	5.22E-10	-2.28E-6	3.20E-6
EP-m	kg N eq	3.33E-4	1.32E-5	1.44E-5	3.61E-4	2.58E-6	1.29E-5	7.47E-7	-1.53E-4	2.23E-4
EP-T	mol N eq	3.38E-3	1.46E-4	1.45E-4	3.67E-3	2.84E-5	1.40E-4	1.57E-6	-1.55E-3	2.29E-3
POCP	kg NMVOC eq	1.26E-3	4.12E-5	4.63E-5	1.34E-3	8.13E-6	4.19E-5	5.72E-7	-5.73E-4	8.22E-4
ADP-mm	kg Sb eq	9.86E-6	1.48E-7	3.37E-7	1.03E-5	3.27E-8	1.58E-7	3.86E-10	-1.21E-6	9.32E-6
ADP-f	MJ	5.30E+0	8.96E-2	3.59E-1	5.75E+0	1.94E-2	1.19E-1	1.17E-3	-2.63E+0	3.27E+0
WDP	m3 depriv.	1.21E-1	2.70E-4	3.91E-3	1.25E-1	5.96E-5	2.58E-3	5.42E-6	-5.71E-2	7.10E-2
PM	disease inc.	1.57E-8	5.18E-10	5.37E-10	1.68E-8	1.14E-10	6.09E-10	7.99E-12	-7.03E-9	1.05E-8
IR	kBq U-235 eq	2.53E-3	3.92E-4	3.25E-4	3.25E-3	8.49E-5	3.73E-4	5.66E-6	-6.07E-4	3.11E-3
ETP-fw	CTUe	1.95E+0	7.23E-2	3.94E-1	2.41E+0	1.58E-2	2.09E-1	2.47E-3	-6.98E-1	1.94E+0
HTP-c	CTUh	8.75E-11	2.62E-12	1.61E-11	1.06E-10	5.61E-13	1.63E-11	3.10E-14	-1.94E-11	1.04E-10
HTP-nc	CTUh	1.43E-9	8.55E-11	3.46E-10	1.86E-9	1.88E-11	2.24E-10	9.96E-13	-4.68E-10	1.64E-9
SQP	Pt	9.40E-1	7.48E-2	5.36E-2	1.07E+0	1.66E-2	-1.98E-1	2.98E-3	-1.35E+0	-4.56E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.76E-1	1.26E-3	8.14E-1	9.92E-1	2.79E-4	-3.66E-2	5.41E-5	-2.55E-1	7.00E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.76E-1	1.26E-3	8.14E-1	9.92E-1	2.79E-4	-3.66E-2	5.41E-5	-2.55E-1	7.00E-1
PENRE	MJ	5.72E+0	9.51E-2	3.93E-1	6.20E+0	2.06E-2	1.27E-1	1.24E-3	-2.84E+0	3.51E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.72E+0	9.51E-2	3.93E-1	6.20E+0	2.06E-2	1.27E-1	1.24E-3	-2.84E+0	3.51E+0
PET	MJ	5.89E+0	9.64E-2	1.21E+0	7.20E+0	2.09E-2	9.00E-2	1.30E-3	-3.10E+0	4.21E+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	2.92E-3	9.97E-6	1.20E-4	3.05E-3	2.20E-6	9.13E-5	1.46E-6	-1.36E-3	1.79E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.04E-7	2.25E-7	3.49E-7	1.48E-6	4.97E-8	2.06E-7	1.40E-9	-4.84E-7	1.25E-6
NHWD	kg	1.84E-2	5.40E-3	1.64E-3	2.54E-2	1.20E-3	6.28E-3	5.11E-3	-2.23E-3	3.58E-2
RWD	kg	3.11E-6	6.10E-7	2.64E-7	3.98E-6	1.32E-7	4.74E-7	7.73E-9	-6.37E-7	3.96E-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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