

Environmental Profile

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

Ecochain v3.5.71



Product: 3029589 - Hep20 Pb Straight Connector 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	1.60E-1	2.38E-3	1.33E-2	1.75E-1	5.28E-4	2.92E-2	2.51E-4	-7.94E-2	1.26E-1
GWP-f	kg CO2 eq	1.62E-1	2.38E-3	1.25E-2	1.77E-1	5.28E-4	2.39E-2	2.51E-4	-8.06E-2	1.21E-1
GWP-b	kg CO2 eq	-2.01E-3	1.38E-6	7.15E-4	-1.29E-3	3.20E-7	5.36E-3	2.53E-7	1.22E-3	5.29E-3
GWP-luluc	kg CO2 eq	3.21E-5	8.64E-7	7.55E-6	4.05E-5	1.87E-7	2.02E-6	4.90E-9	-2.27E-5	2.00E-5
ODP	kg CFC11 eq	3.81E-9	5.46E-10	1.22E-9	5.58E-9	1.22E-10	4.37E-10	6.87E-12	-1.29E-9	4.85E-9
AP	mol H+ eq	7.49E-4	1.58E-5	4.28E-5	8.08E-4	3.01E-6	1.71E-5	1.70E-7	-2.99E-4	5.29E-4
EP-fw	kg P eq	2.24E-6	1.92E-8	1.14E-7	2.37E-6	4.34E-9	7.54E-8	2.25E-10	-9.67E-7	1.49E-6
EP-m	kg N eq	1.41E-4	5.35E-6	7.71E-6	1.54E-4	1.08E-6	5.36E-6	3.22E-7	-6.36E-5	9.69E-5
EP-T	mol N eq	1.43E-3	5.90E-5	8.05E-5	1.57E-3	1.19E-5	5.85E-5	6.78E-7	-6.43E-4	9.98E-4
POCP	kg NMVOC eq	5.31E-4	1.67E-5	2.55E-5	5.73E-4	3.39E-6	1.72E-5	2.47E-7	-2.35E-4	3.59E-4
ADP-mm	kg Sb eq	5.68E-6	6.00E-8	2.13E-7	5.96E-6	1.37E-8	6.38E-8	1.66E-10	-5.62E-7	5.47E-6
ADP-f	MJ	2.26E+0	3.63E-2	1.67E-1	2.47E+0	8.10E-3	4.77E-2	5.05E-4	-1.09E+0	1.43E+0
WDP	m3 depriv.	5.29E-2	1.10E-4	2.09E-3	5.51E-2	2.49E-5	1.07E-3	2.34E-6	-2.40E-2	3.22E-2
PM	disease inc.	6.71E-9	2.10E-10	3.14E-10	7.24E-9	4.76E-11	2.42E-10	3.45E-12	-2.89E-9	4.65E-9
IR	kBq U-235 eq	1.42E-3	1.59E-4	1.66E-4	1.74E-3	3.54E-5	1.50E-4	2.44E-6	-2.78E-4	1.65E-3
ETP-fw	CTUe	9.06E-1	2.93E-2	2.40E-1	1.18E+0	6.58E-3	9.00E-2	1.07E-3	-3.02E-1	9.72E-1
HTP-c	CTUh	3.80E-11	1.06E-12	9.67E-12	4.87E-11	2.34E-13	6.47E-12	1.34E-14	-8.24E-12	4.72E-11
HTP-nc	CTUh	6.39E-10	3.47E-11	2.12E-10	8.86E-10	7.84E-12	9.22E-11	4.30E-13	-1.98E-10	7.89E-10
SQP	Pt	4.48E-1	3.03E-2	3.16E-2	5.10E-1	6.93E-3	-1.08E-1	1.28E-3	-5.79E-1	-1.69E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.28E-2	5.13E-4	5.25E-1	6.08E-1	1.16E-4	-1.89E-2	2.33E-5	-1.09E-1	4.80E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.28E-2	5.13E-4	5.25E-1	6.08E-1	1.16E-4	-1.89E-2	2.33E-5	-1.09E-1	4.80E-1
PENRE	MJ	2.44E+0	3.86E-2	1.82E-1	2.66E+0	8.60E-3	5.08E-2	5.36E-4	-1.18E+0	1.54E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.44E+0	3.86E-2	1.82E-1	2.66E+0	8.60E-3	5.08E-2	5.36E-4	-1.18E+0	1.54E+0
PET	MJ	2.52E+0	3.91E-2	7.07E-1	3.27E+0	8.72E-3	3.19E-2	5.59E-4	-1.29E+0	2.02E+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	1.28E-3	4.04E-6	6.64E-5	1.35E-3	9.17E-7	4.18E-5	6.30E-7	-5.74E-4	8.19E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.43E-7	9.12E-8	1.40E-7	6.74E-7	2.07E-8	8.48E-8	6.03E-10	-2.32E-7	5.49E-7
NHWD	kg	7.89E-3	2.19E-3	6.58E-4	1.07E-2	5.02E-4	2.62E-3	2.20E-3	-9.42E-4	1.51E-2
RWD	kg	1.78E-6	2.47E-7	1.06E-7	2.13E-6	5.51E-8	1.91E-7	3.33E-9	-2.96E-7	2.08E-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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