

Environmental Profile

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

Ecochain v3.5.71



Product: 3029619 - Hep20 Pb Demountable Pipe End Cap WT 15
Unit: 1 piece
Manufacturer: Wavin - UK - Doncaster - Verified

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



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

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	1.40E-1	2.14E-3	1.24E-2	1.55E-1	4.49E-4	2.24E-2	2.06E-4	-7.01E-2	1.08E-1
GWP-f	kg CO2 eq	1.42E-1	2.14E-3	1.17E-2	1.56E-1	4.48E-4	1.70E-2	2.06E-4	-7.13E-2	1.02E-1
GWP-b	kg CO2 eq	-1.95E-3	1.24E-6	6.42E-4	-1.31E-3	2.72E-7	5.36E-3	2.07E-7	1.24E-3	5.29E-3
GWP-luluc	kg CO2 eq	2.71E-5	7.76E-7	7.38E-6	3.53E-5	1.59E-7	1.66E-6	4.01E-9	-2.24E-5	1.47E-5
ODP	kg CFC11 eq	2.41E-9	4.91E-10	1.12E-9	4.01E-9	1.03E-10	3.79E-10	5.62E-12	-9.76E-10	3.52E-9
AP	mol H+ eq	6.49E-4	1.41E-5	4.15E-5	7.04E-4	2.55E-6	1.45E-5	1.39E-7	-2.68E-4	4.53E-4
EP-fw	kg P eq	1.91E-6	1.73E-8	1.10E-7	2.04E-6	3.69E-9	6.46E-8	1.84E-10	-9.05E-7	1.20E-6
EP-m	kg N eq	1.24E-4	4.80E-6	7.35E-6	1.36E-4	9.13E-7	4.53E-6	2.64E-7	-5.75E-5	8.44E-5
EP-T	mol N eq	1.25E-3	5.30E-5	7.73E-5	1.39E-3	1.01E-5	4.93E-5	5.54E-7	-5.81E-4	8.64E-4
POCP	kg NMVOC eq	4.57E-4	1.50E-5	2.44E-5	4.97E-4	2.88E-6	1.46E-5	2.02E-7	-2.10E-4	3.04E-4
ADP-mm	kg Sb eq	3.44E-6	5.39E-8	2.09E-7	3.70E-6	1.16E-8	5.60E-8	1.36E-10	-4.61E-7	3.31E-6
ADP-f	MJ	1.90E+0	3.26E-2	1.56E-1	2.09E+0	6.88E-3	4.13E-2	4.14E-4	-9.45E-1	1.19E+0
WDP	m3 depriv.	4.55E-2	9.86E-5	2.00E-3	4.76E-2	2.11E-5	8.95E-4	1.91E-6	-2.22E-2	2.63E-2
PM	disease inc.	5.76E-9	1.89E-10	3.04E-10	6.25E-9	4.05E-11	2.10E-10	2.82E-12	-2.62E-9	3.89E-9
IR	kBq U-235 eq	8.99E-4	1.43E-4	1.57E-4	1.20E-3	3.01E-5	1.31E-4	2.00E-6	-2.48E-4	1.11E-3
ETP-fw	CTUe	7.58E-1	2.63E-2	2.34E-1	1.02E+0	5.59E-3	7.27E-2	8.73E-4	-2.91E-1	8.06E-1
HTP-c	CTUh	3.20E-11	9.55E-13	9.40E-12	4.24E-11	1.99E-13	5.64E-12	1.10E-14	-7.46E-12	4.07E-11
HTP-nc	CTUh	5.23E-10	3.12E-11	2.07E-10	7.61E-10	6.66E-12	7.85E-11	3.52E-13	-1.82E-10	6.65E-10
SQP	Pt	4.08E-1	2.73E-2	3.06E-2	4.66E-1	5.89E-3	-1.13E-1	1.05E-3	-5.77E-1	-2.17E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.47E-2	4.61E-4	5.15E-1	5.90E-1	9.87E-5	-1.92E-2	1.91E-5	-1.09E-1	4.63E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.47E-2	4.61E-4	5.15E-1	5.90E-1	9.87E-5	-1.92E-2	1.91E-5	-1.09E-1	4.63E-1
PENRE	MJ	2.05E+0	3.47E-2	1.69E-1	2.26E+0	7.30E-3	4.40E-2	4.39E-4	-1.02E+0	1.28E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.05E+0	3.47E-2	1.69E-1	2.26E+0	7.30E-3	4.40E-2	4.39E-4	-1.02E+0	1.28E+0
PET	MJ	2.13E+0	3.51E-2	6.84E-1	2.85E+0	7.40E-3	2.48E-2	4.58E-4	-1.13E+0	1.75E+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	1.10E-3	3.63E-6	6.38E-5	1.16E-3	7.78E-7	3.15E-5	5.15E-7	-5.32E-4	6.65E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.32E-7	8.20E-8	1.26E-7	5.39E-7	1.76E-8	7.11E-8	4.93E-10	-1.76E-7	4.52E-7
NHWD	kg	6.70E-3	1.97E-3	5.93E-4	9.26E-3	4.26E-4	2.22E-3	1.80E-3	-8.54E-4	1.29E-2
RWD	kg	1.09E-6	2.22E-7	9.51E-8	1.41E-6	4.68E-8	1.67E-7	2.73E-9	-2.56E-7	1.37E-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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