

Environmental Profile

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

Ecochain v3.5.71



Product: 3029620 - Hep20 Pb Demountable Pipe End Cap 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	2.53E-1	3.62E-3	1.94E-2	2.76E-1	8.44E-4	3.81E-2	3.77E-4	-1.28E-1	1.87E-1
GWP-f	kg CO2 eq	2.57E-1	3.62E-3	1.81E-2	2.79E-1	8.43E-4	2.78E-2	3.77E-4	-1.30E-1	1.78E-1
GWP-b	kg CO2 eq	-3.84E-3	2.09E-6	1.22E-3	-2.61E-3	5.12E-7	1.03E-2	3.79E-7	1.43E-3	9.08E-3
GWP-luluc	kg CO2 eq	4.36E-5	1.31E-6	8.80E-6	5.38E-5	2.98E-7	3.09E-6	7.35E-9	-3.74E-5	1.98E-5
ODP	kg CFC11 eq	3.29E-9	8.29E-10	1.92E-9	6.04E-9	1.94E-10	7.07E-10	1.03E-11	-1.59E-9	5.37E-9
AP	mol H+ eq	1.19E-3	2.40E-5	5.25E-5	1.27E-3	4.80E-6	2.68E-5	2.55E-7	-5.00E-4	8.03E-4
EP-fw	kg P eq	3.25E-6	2.92E-8	1.46E-7	3.42E-6	6.94E-9	1.22E-7	3.38E-10	-1.56E-6	1.99E-6
EP-m	kg N eq	2.23E-4	8.14E-6	1.02E-5	2.41E-4	1.72E-6	8.28E-6	4.83E-7	-1.04E-4	1.47E-4
EP-T	mol N eq	2.26E-3	8.98E-5	1.03E-4	2.45E-3	1.89E-5	9.01E-5	1.02E-6	-1.06E-3	1.50E-3
POCP	kg NMVOC eq	8.37E-4	2.54E-5	3.29E-5	8.96E-4	5.41E-6	2.68E-5	3.70E-7	-3.91E-4	5.37E-4
ADP-mm	kg Sb eq	4.50E-6	9.11E-8	2.45E-7	4.83E-6	2.18E-8	1.05E-7	2.50E-10	-7.52E-7	4.21E-6
ADP-f	MJ	3.48E+0	5.52E-2	2.49E-1	3.79E+0	1.29E-2	7.79E-2	7.58E-4	-1.77E+0	2.12E+0
WDP	m3 depriv.	7.90E-2	1.66E-4	2.76E-3	8.20E-2	3.97E-5	1.66E-3	3.51E-6	-3.89E-2	4.47E-2
PM	disease inc.	1.04E-8	3.19E-10	3.85E-10	1.11E-8	7.61E-11	3.92E-10	5.17E-12	-4.82E-9	6.78E-9
IR	kBq U-235 eq	1.24E-3	2.41E-4	2.28E-4	1.71E-3	5.66E-5	2.46E-4	3.66E-6	-4.01E-4	1.62E-3
ETP-fw	CTUe	1.24E+0	4.45E-2	2.84E-1	1.57E+0	1.05E-2	1.30E-1	1.60E-3	-4.89E-1	1.22E+0
HTP-c	CTUh	5.76E-11	1.61E-12	1.16E-11	7.08E-11	3.74E-13	1.07E-11	2.01E-14	-1.32E-11	6.87E-11
HTP-nc	CTUh	9.11E-10	5.26E-11	2.50E-10	1.21E-9	1.25E-11	1.47E-10	6.45E-13	-3.21E-10	1.05E-9
SQP	Pt	7.35E-1	4.60E-2	3.85E-2	8.20E-1	1.11E-2	-2.29E-1	1.93E-3	-9.63E-1	-3.60E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.33E-1	7.79E-4	5.93E-1	7.27E-1	1.86E-4	-3.87E-2	3.50E-5	-1.83E-1	5.06E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.33E-1	7.79E-4	5.93E-1	7.27E-1	1.86E-4	-3.87E-2	3.50E-5	-1.83E-1	5.06E-1
PENRE	MJ	3.76E+0	5.86E-2	2.72E-1	4.09E+0	1.37E-2	8.30E-2	8.04E-4	-1.91E+0	2.28E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.76E+0	5.86E-2	2.72E-1	4.09E+0	1.37E-2	8.30E-2	8.04E-4	-1.91E+0	2.28E+0
PET	MJ	3.89E+0	5.94E-2	8.66E-1	4.82E+0	1.39E-2	4.43E-2	8.39E-4	-2.09E+0	2.78E+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	1.90E-3	6.14E-6	8.52E-5	1.99E-3	1.46E-6	5.39E-5	9.44E-7	-9.31E-4	1.12E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.33E-7	1.38E-7	2.38E-7	9.09E-7	3.31E-8	1.30E-7	9.04E-10	-2.89E-7	7.85E-7
NHWD	kg	1.22E-2	3.32E-3	1.11E-3	1.66E-2	8.02E-4	4.14E-3	3.30E-3	-1.52E-3	2.33E-2
RWD	kg	1.46E-6	3.75E-7	1.80E-7	2.02E-6	8.80E-8	3.14E-7	5.00E-9	-4.11E-7	2.02E-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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