

Environmental Profile

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

Ecochain v3.5.71



Product: 3030686 - Hep20 Pipe Clips Cable Type 22
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	2.20E-2	1.59E-4	1.75E-3	2.39E-2	1.58E-4	9.39E-3	7.45E-5	-8.18E-3	2.53E-2
GWP-f	kg CO2 eq	2.45E-2	1.59E-4	1.60E-3	2.62E-2	1.58E-4	4.48E-3	7.45E-5	-8.46E-3	2.25E-2
GWP-b	kg CO2 eq	-2.53E-3	9.65E-8	1.45E-4	-2.39E-3	9.59E-8	4.91E-3	6.50E-8	2.97E-4	2.82E-3
GWP-luluc	kg CO2 eq	2.83E-5	5.63E-8	3.57E-7	2.87E-5	5.59E-8	-1.93E-9	1.25E-9	-1.61E-5	1.26E-5
ODP	kg CFC11 eq	1.30E-9	3.66E-11	2.02E-10	1.54E-9	3.64E-11	1.13E-10	1.87E-12	-4.24E-10	1.27E-9
AP	mol H+ eq	1.09E-4	9.06E-7	2.77E-6	1.13E-4	9.00E-7	4.17E-6	4.44E-8	-3.06E-5	8.72E-5
EP-fw	kg P eq	8.27E-7	1.31E-9	8.98E-9	8.37E-7	1.30E-9	1.49E-8	5.75E-11	-2.63E-7	5.90E-7
EP-m	kg N eq	2.09E-5	3.24E-7	7.13E-7	2.19E-5	3.22E-7	1.34E-6	2.91E-8	-5.96E-6	1.77E-5
EP-T	mol N eq	2.31E-4	3.57E-6	6.37E-6	2.41E-4	3.55E-6	1.45E-5	1.81E-7	-6.74E-5	1.92E-4
POCP	kg NMVOC eq	7.87E-5	1.02E-6	2.12E-6	8.18E-5	1.01E-6	4.13E-6	6.78E-8	-2.52E-5	6.18E-5
ADP-mm	kg Sb eq	3.22E-7	4.11E-9	8.97E-9	3.35E-7	4.09E-9	1.88E-8	4.46E-11	-6.25E-8	2.95E-7
ADP-f	MJ	6.11E-1	2.44E-3	2.34E-2	6.37E-1	2.42E-3	1.26E-2	1.36E-4	-2.50E-1	4.02E-1
WDP	m3 depriv.	8.95E-3	7.49E-6	1.91E-4	9.15E-3	7.44E-6	2.39E-4	6.23E-7	-7.01E-3	2.39E-3
PM	disease inc.	9.67E-10	1.44E-11	2.03E-11	1.00E-9	1.43E-11	5.88E-11	9.36E-13	-3.72E-10	7.04E-10
IR	kBq U-235 eq	7.77E-4	1.07E-5	1.78E-5	8.05E-4	1.06E-5	4.19E-5	6.33E-7	-2.37E-4	6.21E-4
ETP-fw	CTUe	5.58E-1	1.98E-3	1.26E-2	5.72E-1	1.97E-3	1.44E-2	1.14E-4	-1.89E-1	4.00E-1
HTP-c	CTUh	8.53E-12	7.05E-14	5.51E-13	9.16E-12	7.01E-14	1.60E-12	3.28E-15	-2.46E-12	8.38E-12
HTP-nc	CTUh	2.15E-10	2.36E-12	1.08E-11	2.28E-10	2.35E-12	2.33E-11	7.31E-14	-7.67E-11	1.77E-10
SQP	Pt	3.51E-1	2.09E-3	1.97E-3	3.55E-1	2.07E-3	-1.35E-1	3.50E-4	-3.90E-1	-1.67E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.55E-2	3.50E-5	1.95E-2	8.51E-2	3.48E-5	-2.07E-2	5.31E-6	-7.30E-2	-8.53E-3
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.55E-2	3.50E-5	1.95E-2	8.51E-2	3.48E-5	-2.07E-2	5.31E-6	-7.30E-2	-8.53E-3
PENRE	MJ	6.55E-1	2.59E-3	2.57E-2	6.83E-1	2.57E-3	1.34E-2	1.44E-4	-2.69E-1	4.30E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.55E-1	2.59E-3	2.57E-2	6.83E-1	2.57E-3	1.34E-2	1.44E-4	-2.69E-1	4.30E-1
PET	MJ	7.21E-1	2.63E-3	4.53E-2	7.68E-1	2.61E-3	-7.31E-3	1.50E-4	-3.42E-1	4.22E-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	2.37E-4	2.76E-7	5.36E-6	2.43E-4	2.74E-7	7.26E-6	1.68E-7	-1.38E-4	1.12E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.21E-7	6.24E-9	2.80E-8	4.55E-7	6.20E-9	1.88E-8	1.64E-10	-7.97E-8	4.00E-7
NHWD	kg	2.19E-3	1.51E-4	1.30E-4	2.47E-3	1.50E-4	7.61E-4	6.01E-4	-3.46E-4	3.64E-3
RWD	kg	7.12E-7	1.66E-8	2.11E-8	7.50E-7	1.65E-8	5.58E-8	8.90E-10	-2.20E-7	6.03E-7
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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