

Environmental Profile

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

Ecochain v3.5.71



Product: 3030687 - Hep20 Pipe Clips Cable Type 28
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	2.94E-2	1.58E-4	3.49E-3	3.30E-2	2.11E-4	6.11E-3	9.93E-5	-9.80E-3	2.96E-2
GWP-f	kg CO2 eq	2.98E-2	1.58E-4	3.20E-3	3.32E-2	2.11E-4	6.12E-3	9.93E-5	-9.77E-3	2.98E-2
GWP-b	kg CO2 eq	-4.54E-4	9.59E-8	2.91E-4	-1.64E-4	1.28E-7	-8.45E-6	8.66E-8	-3.42E-5	-2.06E-4
GWP-luluc	kg CO2 eq	2.07E-5	5.59E-8	7.14E-7	2.14E-5	7.45E-8	1.18E-6	1.66E-9	-1.89E-6	2.08E-5
ODP	kg CFC11 eq	1.36E-9	3.64E-11	4.03E-10	1.80E-9	4.85E-11	1.54E-10	2.49E-12	-3.61E-10	1.64E-9
AP	mol H+ eq	1.30E-4	9.00E-7	5.54E-6	1.36E-4	1.20E-6	6.46E-6	5.92E-8	-2.74E-5	1.17E-4
EP-fw	kg P eq	9.14E-7	1.30E-9	1.80E-8	9.33E-7	1.73E-9	3.41E-8	7.67E-11	-1.08E-7	8.61E-7
EP-m	kg N eq	2.25E-5	3.22E-7	1.43E-6	2.43E-5	4.29E-7	1.88E-6	3.88E-8	-4.85E-6	2.18E-5
EP-T	mol N eq	2.58E-4	3.55E-6	1.27E-5	2.74E-4	4.73E-6	2.07E-5	2.41E-7	-5.37E-5	2.46E-4
POCP	kg NMVOC eq	9.24E-5	1.01E-6	4.23E-6	9.76E-5	1.35E-6	6.54E-6	9.04E-8	-2.48E-5	8.08E-5
ADP-mm	kg Sb eq	4.55E-7	4.09E-9	1.79E-8	4.77E-7	5.45E-9	2.56E-8	5.95E-11	-6.47E-8	4.44E-7
ADP-f	MJ	7.72E-1	2.42E-3	4.67E-2	8.21E-1	3.23E-3	2.05E-2	1.82E-4	-3.08E-1	5.37E-1
WDP	m3 depriv.	1.09E-2	7.44E-6	3.81E-4	1.13E-2	9.92E-6	4.03E-4	8.31E-7	-5.34E-3	6.38E-3
PM	disease inc.	1.03E-9	1.43E-11	4.07E-11	1.08E-9	1.90E-11	1.06E-10	1.25E-12	-2.30E-10	9.80E-10
IR	kBq U-235 eq	8.97E-4	1.06E-5	3.57E-5	9.43E-4	1.41E-5	6.18E-5	8.43E-7	-1.43E-4	8.77E-4
ETP-fw	CTUe	3.89E-1	1.97E-3	2.53E-2	4.16E-1	2.62E-3	2.31E-2	1.52E-4	-3.80E-2	4.04E-1
HTP-c	CTUh	9.11E-12	7.01E-14	1.10E-12	1.03E-11	9.34E-14	2.74E-12	4.37E-15	-1.63E-12	1.15E-11
HTP-nc	CTUh	2.43E-10	2.35E-12	2.16E-11	2.67E-10	3.13E-12	3.43E-11	9.74E-14	-4.61E-11	2.59E-10
SQP	Pt	1.13E-1	2.07E-3	3.93E-3	1.19E-1	2.77E-3	1.64E-2	4.66E-4	-8.26E-3	1.30E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.83E-2	3.48E-5	3.91E-2	6.74E-2	4.64E-5	1.01E-3	7.08E-6	-3.83E-3	6.46E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.83E-2	3.48E-5	3.91E-2	6.74E-2	4.64E-5	1.01E-3	7.08E-6	-3.83E-3	6.46E-2
PENRE	MJ	8.27E-1	2.57E-3	5.15E-2	8.81E-1	3.43E-3	2.18E-2	1.93E-4	-3.32E-1	5.74E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.27E-1	2.57E-3	5.15E-2	8.81E-1	3.43E-3	2.18E-2	1.93E-4	-3.32E-1	5.74E-1
PET	MJ	8.55E-1	2.61E-3	9.05E-2	9.49E-1	3.48E-3	2.29E-2	2.00E-4	-3.36E-1	6.39E-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	2.79E-4	2.74E-7	1.07E-5	2.90E-4	3.66E-7	1.18E-5	2.24E-7	-7.98E-5	2.23E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.02E-7	6.20E-9	5.59E-8	5.64E-7	8.27E-9	3.33E-8	2.18E-10	-7.10E-8	5.35E-7
NHWD	kg	2.42E-3	1.50E-4	2.60E-4	2.83E-3	2.00E-4	1.01E-3	8.01E-4	-2.37E-4	4.60E-3
RWD	kg	8.01E-7	1.65E-8	4.23E-8	8.60E-7	2.20E-8	7.83E-8	1.19E-9	-1.29E-7	8.33E-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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