

Environmental Profile

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

Ecochain v3.5.71



Product: 3030688 - Hep20 Pipe Clips Screw Type 15
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	1.17E-2	7.90E-5	2.38E-3	1.42E-2	1.05E-4	3.03E-3	4.92E-5	-5.61E-3	1.17E-2
GWP-f	kg CO2 eq	1.16E-2	7.90E-5	2.31E-3	1.40E-2	1.05E-4	3.03E-3	4.92E-5	-5.59E-3	1.16E-2
GWP-b	kg CO2 eq	6.93E-5	4.80E-8	6.87E-5	1.38E-4	6.39E-8	-4.23E-6	4.12E-8	-2.14E-5	1.12E-4
GWP-luluc	kg CO2 eq	5.13E-6	2.79E-8	2.10E-6	7.26E-6	3.73E-8	5.91E-7	1.11E-9	-7.11E-7	7.17E-6
ODP	kg CFC11 eq	6.86E-10	1.82E-11	1.70E-10	8.74E-10	2.43E-11	7.68E-11	1.26E-12	-1.36E-10	8.40E-10
AP	mol H+ eq	1.32E-4	4.50E-7	1.11E-5	1.44E-4	6.00E-7	3.21E-6	3.12E-8	-2.12E-5	1.26E-4
EP-fw	kg P eq	3.69E-7	6.50E-10	2.76E-8	3.97E-7	8.66E-10	1.70E-8	4.70E-11	-4.13E-8	3.74E-7
EP-m	kg N eq	1.02E-5	1.61E-7	1.74E-6	1.21E-5	2.15E-7	9.27E-7	1.76E-8	-3.23E-6	1.00E-5
EP-T	mol N eq	1.05E-4	1.77E-6	1.94E-5	1.26E-4	2.36E-6	1.02E-5	1.24E-7	-3.55E-5	1.03E-4
POCP	kg NMVOC eq	4.33E-5	5.07E-7	6.03E-6	4.98E-5	6.76E-7	3.23E-6	4.62E-8	-1.79E-5	3.58E-5
ADP-mm	kg Sb eq	1.77E-7	2.04E-9	6.06E-8	2.39E-7	2.72E-9	1.28E-8	3.36E-11	-2.43E-8	2.31E-7
ADP-f	MJ	2.86E-1	1.21E-3	2.85E-2	3.16E-1	1.62E-3	1.03E-2	9.30E-5	-1.59E-1	1.69E-1
WDP	m3 depriv.	1.10E-2	3.72E-6	4.76E-4	1.15E-2	4.96E-6	1.98E-4	1.38E-6	-2.18E-3	9.48E-3
PM	disease inc.	6.11E-10	7.13E-12	8.09E-11	6.99E-10	9.50E-12	5.30E-11	6.40E-13	-1.80E-10	5.82E-10
IR	kBq U-235 eq	3.66E-4	5.30E-6	3.45E-5	4.05E-4	7.06E-6	3.09E-5	4.14E-7	-5.38E-5	3.90E-4
ETP-fw	CTUe	1.92E-1	9.84E-4	6.53E-2	2.58E-1	1.31E-3	1.16E-2	7.76E-5	-1.52E-2	2.56E-1
HTP-c	CTUh	1.84E-11	3.50E-14	2.58E-12	2.10E-11	4.67E-14	1.92E-12	2.95E-15	-7.36E-13	2.22E-11
HTP-nc	CTUh	2.12E-10	1.17E-12	5.82E-11	2.71E-10	1.56E-12	1.86E-11	5.42E-14	-2.05E-11	2.71E-10
SQP	Pt	4.95E-2	1.04E-3	8.24E-3	5.87E-2	1.38E-3	8.20E-3	2.34E-4	-3.13E-3	6.54E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.12E-2	1.74E-5	1.52E-1	1.63E-1	2.32E-5	5.06E-4	3.09E-6	-1.63E-3	1.62E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.12E-2	1.74E-5	1.52E-1	1.63E-1	2.32E-5	5.06E-4	3.09E-6	-1.63E-3	1.62E-1
PENRE	MJ	3.07E-1	1.29E-3	3.07E-2	3.39E-1	1.72E-3	1.09E-2	9.87E-5	-1.71E-1	1.81E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.07E-1	1.29E-3	3.07E-2	3.39E-1	1.72E-3	1.09E-2	9.87E-5	-1.71E-1	1.81E-1
PET	MJ	3.18E-1	1.30E-3	1.83E-1	5.02E-1	1.74E-3	1.14E-2	1.02E-4	-1.73E-1	3.43E-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	2.33E-4	1.37E-7	1.59E-5	2.49E-4	1.83E-7	5.85E-6	1.10E-7	-3.42E-5	2.21E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.03E-7	3.10E-9	1.40E-8	1.20E-7	4.13E-9	1.72E-8	1.20E-10	-2.68E-8	1.15E-7
NHWD	kg	4.50E-3	7.51E-5	6.79E-5	4.64E-3	1.00E-4	5.08E-4	4.01E-4	-1.09E-4	5.54E-3
RWD	kg	3.60E-7	8.24E-9	1.06E-8	3.79E-7	1.10E-8	3.92E-8	5.94E-10	-4.85E-8	3.81E-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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