

Environmental Profile

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

Ecochain v3.5.71



Product: 3030685 - Hep20 Pipe Clips Cable 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

This document and supporting material contain confidential and proprietary business information of Wavin - UK - Doncaster - Verified. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - UK - Doncaster - Verified.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.56E-2	9.23E-5	1.75E-3	1.75E-2	1.05E-4	3.59E-3	4.97E-5	-4.42E-3	1.68E-2
GWP-f	kg CO2 eq	1.58E-2	9.23E-5	1.60E-3	1.75E-2	1.05E-4	3.14E-3	4.97E-5	-5.45E-3	1.54E-2
GWP-b	kg CO2 eq	-2.11E-4	5.60E-8	1.45E-4	-6.61E-5	6.39E-8	4.54E-4	4.33E-8	1.03E-3	1.42E-3
GWP-luluc	kg CO2 eq	1.62E-5	3.27E-8	3.57E-7	1.66E-5	3.73E-8	6.18E-7	8.32E-10	-8.25E-6	8.97E-6
ODP	kg CFC11 eq	8.03E-10	2.13E-11	2.02E-10	1.03E-9	2.43E-11	9.12E-11	1.24E-12	-2.56E-10	8.86E-10
AP	mol H+ eq	7.00E-5	5.26E-7	2.77E-6	7.33E-5	6.00E-7	3.73E-6	2.96E-8	-1.86E-5	5.90E-5
EP-fw	kg P eq	5.21E-7	7.59E-10	8.98E-9	5.31E-7	8.66E-10	1.81E-8	3.83E-11	-1.45E-7	4.06E-7
EP-m	kg N eq	1.30E-5	1.88E-7	7.13E-7	1.39E-5	2.15E-7	1.13E-6	1.94E-8	-3.56E-6	1.17E-5
EP-T	mol N eq	1.46E-4	2.07E-6	6.37E-6	1.54E-4	2.36E-6	1.24E-5	1.20E-7	-4.00E-5	1.29E-4
POCP	kg NMVOC eq	4.98E-5	5.92E-7	2.12E-6	5.25E-5	6.76E-7	3.88E-6	4.52E-8	-1.56E-5	4.15E-5
ADP-mm	kg Sb eq	2.40E-7	2.39E-9	8.97E-9	2.51E-7	2.72E-9	1.50E-8	2.98E-11	-3.93E-8	2.30E-7
ADP-f	MJ	3.99E-1	1.42E-3	2.34E-2	4.24E-1	1.62E-3	1.12E-2	9.08E-5	-1.64E-1	2.74E-1
WDP	m3 depriv.	5.80E-3	4.35E-6	1.91E-4	6.00E-3	4.96E-6	2.09E-4	4.15E-7	-4.17E-3	2.04E-3
PM	disease inc.	5.93E-10	8.33E-12	2.03E-11	6.22E-10	9.50E-12	6.08E-11	6.24E-13	-2.13E-10	4.79E-10
IR	kBq U-235 eq	4.93E-4	6.19E-6	1.78E-5	5.17E-4	7.06E-6	3.51E-5	4.22E-7	-1.36E-4	4.24E-4
ETP-fw	CTUe	3.25E-1	1.15E-3	1.26E-2	3.39E-1	1.31E-3	1.34E-2	7.60E-5	-9.84E-2	2.55E-1
HTP-c	CTUh	5.06E-12	4.09E-14	5.51E-13	5.66E-12	4.67E-14	1.52E-12	2.19E-15	-1.42E-12	5.80E-12
HTP-nc	CTUh	1.36E-10	1.37E-12	1.08E-11	1.48E-10	1.56E-12	1.88E-11	4.87E-14	-4.37E-11	1.25E-10
SQP	Pt	9.84E-2	1.21E-3	1.97E-3	1.02E-1	1.38E-3	8.72E-3	2.33E-4	-1.92E-1	-8.04E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.29E-2	2.03E-5	1.95E-2	4.24E-2	2.32E-5	5.34E-4	3.54E-6	-3.60E-2	6.96E-3
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.29E-2	2.03E-5	1.95E-2	4.24E-2	2.32E-5	5.34E-4	3.54E-6	-3.60E-2	6.96E-3
PENRE	MJ	4.28E-1	1.50E-3	2.57E-2	4.55E-1	1.72E-3	1.19E-2	9.63E-5	-1.76E-1	2.93E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.28E-1	1.50E-3	2.57E-2	4.55E-1	1.72E-3	1.19E-2	9.63E-5	-1.76E-1	2.93E-1
PET	MJ	4.51E-1	1.52E-3	4.53E-2	4.98E-1	1.74E-3	1.25E-2	9.99E-5	-2.12E-1	3.00E-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	1.53E-4	1.60E-7	5.36E-6	1.58E-4	1.83E-7	6.29E-6	1.12E-7	-7.92E-5	8.54E-5

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.71E-7	3.62E-9	2.80E-8	3.02E-7	4.13E-9	1.92E-8	1.09E-10	-4.86E-8	2.77E-7
NHWD	kg	1.39E-3	8.78E-5	1.30E-4	1.61E-3	1.00E-4	5.43E-4	4.00E-4	-2.01E-4	2.45E-3
RWD	kg	4.48E-7	9.63E-9	2.11E-8	4.78E-7	1.10E-8	4.52E-8	5.93E-10	-1.26E-7	4.09E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777