

Environmental Profile

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

Ecochain v3.5.71



Product: 4013791 - Hep20 Pipe Cutter-Scissor Type A
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	3.49E-1	3.50E-3	7.34E-5	3.53E-1	0	1.24E-2	0	-1.41E-1	2.25E-1
GWP-f	kg CO2 eq	3.49E-1	3.49E-3	6.73E-5	3.52E-1	0	1.26E-2	0	-1.42E-1	2.23E-1
GWP-b	kg CO2 eq	2.20E-4	2.12E-6	6.10E-6	2.28E-4	0	-2.43E-4	0	1.46E-3	1.45E-3
GWP-luluc	kg CO2 eq	2.48E-4	1.24E-6	1.50E-8	2.49E-4	0	6.87E-6	0	1.04E-4	3.60E-4
ODP	kg CFC11 eq	2.06E-8	8.05E-10	8.46E-12	2.14E-8	0	1.95E-9	0	-3.60E-9	1.98E-8
AP	mol H+ eq	1.80E-3	1.99E-5	1.16E-7	1.82E-3	0	8.54E-5	0	-5.43E-4	1.37E-3
EP-fw	kg P eq	2.03E-5	2.88E-8	3.77E-10	2.04E-5	0	3.41E-7	0	-4.96E-6	1.57E-5
EP-m	kg N eq	3.71E-4	7.12E-6	2.99E-8	3.78E-4	0	2.34E-5	0	-1.01E-4	3.00E-4
EP-T	mol N eq	4.08E-3	7.85E-5	2.68E-7	4.16E-3	0	2.65E-4	0	-1.18E-3	3.24E-3
POCP	kg NMVOC eq	1.67E-3	2.24E-5	8.88E-8	1.69E-3	0	7.40E-5	0	-8.00E-4	9.69E-4
ADP-mm	kg Sb eq	9.53E-6	9.04E-8	3.77E-10	9.62E-6	0	3.88E-7	0	-9.58E-8	9.91E-6
ADP-f	MJ	3.98E+0	5.36E-2	9.82E-4	4.03E+0	0	1.49E-1	0	-1.01E+0	3.17E+0
WDP	m3 depriv.	1.13E-1	1.65E-4	8.01E-6	1.13E-1	0	8.91E-4	0	-2.69E-2	8.73E-2
PM	disease inc.	3.17E-8	3.15E-10	8.54E-13	3.20E-8	0	1.18E-9	0	-8.12E-9	2.51E-8
IR	kBq U-235 eq	9.39E-3	2.34E-4	7.49E-7	9.63E-3	0	6.85E-4	0	2.39E-3	1.27E-2
ETP-fw	CTUe	1.46E+1	4.36E-2	5.31E-4	1.46E+1	0	3.29E-1	0	-4.71E+0	1.02E+1
HTP-c	CTUh	2.82E-9	1.55E-12	2.31E-14	2.82E-9	0	9.13E-12	0	-1.83E-11	2.82E-9
HTP-nc	CTUh	3.34E-8	5.19E-11	4.54E-13	3.35E-8	0	3.85E-10	0	2.72E-8	6.11E-8
SQP	Pt	1.47E+0	4.59E-2	8.26E-5	1.52E+0	0	1.96E-1	0	-2.18E-1	1.50E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.42E-1	7.70E-4	8.20E-4	3.44E-1	0	1.06E-2	0	2.84E-2	3.83E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.42E-1	7.70E-4	8.20E-4	3.44E-1	0	1.06E-2	0	2.84E-2	3.83E-1
PENRE	MJ	4.23E+0	5.69E-2	1.08E-3	4.29E+0	0	1.58E-1	0	-1.05E+0	3.39E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.23E+0	5.69E-2	1.08E-3	4.29E+0	0	1.58E-1	0	-1.05E+0	3.39E+0
PET	MJ	4.57E+0	5.77E-2	1.90E-3	4.63E+0	0	1.68E-1	0	-1.02E+0	3.78E+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	3.48E-3	6.07E-6	2.25E-7	3.48E-3	0	3.92E-5	0	-5.10E-4	3.01E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.90E-5	1.37E-7	1.17E-9	1.91E-5	0	4.07E-7	0	-1.69E-5	2.69E-6
NHWD	kg	1.40E-1	3.32E-3	5.45E-6	1.44E-1	0	9.10E-3	0	-1.38E-2	1.39E-1
RWD	kg	8.93E-6	3.65E-7	8.88E-10	9.30E-6	0	9.57E-7	0	8.18E-7	1.11E-5
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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