

Environmental Profile

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

Ecochain v3.5.71



Product: 3070726 - Hep20 Pb Skt/Skt Reducer WT 15 x 10
 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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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	2.19E-1	3.27E-3	4.53E-3	2.26E-1	7.13E-4	3.06E-2	3.31E-4	-1.06E-1	1.51E-1
GWP-f	kg CO2 eq	2.18E-1	3.27E-3	4.53E-3	2.26E-1	7.12E-4	2.92E-2	3.31E-4	-1.09E-1	1.47E-1
GWP-b	kg CO2 eq	3.50E-4	1.89E-6	-1.10E-5	3.41E-4	4.32E-7	1.35E-3	3.33E-7	2.94E-3	4.63E-3
GWP-luluc	kg CO2 eq	3.25E-5	1.19E-6	5.77E-6	3.95E-5	2.52E-7	4.04E-6	6.46E-9	-2.27E-5	2.11E-5
ODP	kg CFC11 eq	4.05E-9	7.49E-10	2.10E-10	5.01E-9	1.64E-10	6.22E-10	9.06E-12	-1.51E-9	4.30E-9
AP	mol H+ eq	1.01E-3	2.17E-5	2.90E-5	1.06E-3	4.06E-6	2.49E-5	2.24E-7	-4.07E-4	6.78E-4
EP-fw	kg P eq	2.86E-6	2.64E-8	6.94E-8	2.95E-6	5.86E-9	1.20E-7	2.97E-10	-1.23E-6	1.85E-6
EP-m	kg N eq	1.88E-4	7.35E-6	4.15E-6	2.00E-4	1.45E-6	7.59E-6	4.25E-7	-8.63E-5	1.23E-4
EP-T	mol N eq	1.91E-3	8.10E-5	4.87E-5	2.04E-3	1.60E-5	8.30E-5	8.93E-7	-8.71E-4	1.27E-3
POCP	kg NMVOC eq	7.08E-4	2.29E-5	1.49E-5	7.46E-4	4.57E-6	2.53E-5	3.25E-7	-3.20E-4	4.56E-4
ADP-mm	kg Sb eq	6.17E-6	8.23E-8	1.69E-7	6.42E-6	1.84E-8	9.17E-8	2.19E-10	-7.16E-7	5.82E-6
ADP-f	MJ	2.99E+0	4.98E-2	5.05E-2	3.09E+0	1.09E-2	7.08E-2	6.66E-4	-1.47E+0	1.71E+0
WDP	m3 depriv.	7.00E-2	1.50E-4	1.14E-3	7.13E-2	3.35E-5	1.54E-3	3.08E-6	-3.14E-2	4.15E-2
PM	disease inc.	8.85E-9	2.88E-10	2.12E-10	9.35E-9	6.43E-11	3.74E-10	4.54E-12	-3.87E-9	5.92E-9
IR	kBq U-235 eq	1.51E-3	2.18E-4	7.68E-5	1.80E-3	4.78E-5	2.19E-4	3.22E-6	-2.89E-4	1.79E-3
ETP-fw	CTUe	9.98E-1	4.02E-2	1.77E-1	1.22E+0	8.88E-3	1.25E-1	1.41E-3	-3.19E-1	1.03E+0
HTP-c	CTUh	4.82E-11	1.46E-12	6.93E-12	5.66E-11	3.16E-13	9.77E-12	1.77E-14	-1.05E-11	5.62E-11
HTP-nc	CTUh	8.01E-10	4.76E-11	1.58E-10	1.01E-9	1.06E-11	1.31E-10	5.67E-13	-2.46E-10	9.03E-10
SQP	Pt	2.88E-1	4.16E-2	2.18E-2	3.51E-1	9.35E-3	5.44E-2	1.69E-3	-5.73E-1	-1.57E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.25E-2	7.03E-4	4.27E-1	4.91E-1	1.57E-4	3.53E-3	3.08E-5	-1.09E-1	3.85E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.25E-2	7.03E-4	4.27E-1	4.91E-1	1.57E-4	3.53E-3	3.08E-5	-1.09E-1	3.85E-1
PENRE	MJ	3.23E+0	5.29E-2	5.36E-2	3.33E+0	1.16E-2	7.55E-2	7.07E-4	-1.59E+0	1.83E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.23E+0	5.29E-2	5.36E-2	3.33E+0	1.16E-2	7.55E-2	7.07E-4	-1.59E+0	1.83E+0
PET	MJ	3.29E+0	5.36E-2	4.81E-1	3.82E+0	1.18E-2	7.90E-2	7.37E-4	-1.70E+0	2.21E+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	1.68E-3	5.55E-6	3.97E-5	1.73E-3	1.24E-6	5.54E-5	8.30E-7	-7.46E-4	1.04E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.92E-7	1.25E-7	1.89E-10	6.17E-7	2.80E-8	1.27E-7	7.94E-10	-2.72E-7	5.01E-7
NHWD	kg	1.01E-2	3.00E-3	9.79E-6	1.31E-2	6.77E-4	3.58E-3	2.90E-3	-1.19E-3	1.91E-2
RWD	kg	1.88E-6	3.39E-7	1.40E-10	2.22E-6	7.43E-8	2.76E-7	4.39E-9	-3.11E-7	2.26E-6
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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