

Environmental Profile

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

Ecochain v3.5.71



Product: 3070724 - Hep20 Pb Skt/Skt Reducer WT 15x22
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	3.81E-1	5.82E-3	4.54E-3	3.92E-1	1.24E-3	4.89E-2	5.60E-4	-1.82E-1	2.60E-1
GWP-f	kg CO2 eq	3.80E-1	5.82E-3	4.54E-3	3.91E-1	1.24E-3	4.43E-2	5.60E-4	-1.92E-1	2.45E-1
GWP-b	kg CO2 eq	8.63E-4	3.36E-6	-1.02E-5	8.56E-4	7.52E-7	4.54E-3	5.63E-7	1.01E-2	1.55E-2
GWP-luluc	kg CO2 eq	7.83E-5	2.11E-6	5.77E-6	8.62E-5	4.38E-7	7.33E-6	1.09E-8	-7.41E-5	1.99E-5
ODP	kg CFC11 eq	5.73E-9	1.33E-9	2.11E-10	7.27E-9	2.85E-10	1.16E-9	1.53E-11	-2.65E-9	6.09E-9
AP	mol H+ eq	1.77E-3	3.86E-5	2.90E-5	1.83E-3	7.05E-6	4.56E-5	3.79E-7	-7.43E-4	1.14E-3
EP-fw	kg P eq	5.00E-6	4.70E-8	6.95E-8	5.11E-6	1.02E-8	2.18E-7	5.02E-10	-2.54E-6	2.80E-6
EP-m	kg N eq	3.32E-4	1.31E-5	4.15E-6	3.49E-4	2.52E-6	1.40E-5	7.18E-7	-1.56E-4	2.10E-4
EP-T	mol N eq	3.36E-3	1.45E-4	4.88E-5	3.55E-3	2.78E-5	1.53E-4	1.51E-6	-1.58E-3	2.15E-3
POCP	kg NMVOC eq	1.24E-3	4.08E-5	1.49E-5	1.29E-3	7.95E-6	4.69E-5	5.49E-7	-5.80E-4	7.67E-4
ADP-mm	kg Sb eq	7.71E-6	1.47E-7	1.69E-7	8.02E-6	3.20E-8	1.73E-7	3.71E-10	-1.16E-6	7.06E-6
ADP-f	MJ	5.17E+0	8.88E-2	5.06E-2	5.31E+0	1.90E-2	1.30E-1	1.13E-3	-2.61E+0	2.85E+0
WDP	m3 depriv.	1.19E-1	2.68E-4	1.14E-3	1.20E-1	5.83E-5	2.69E-3	5.20E-6	-6.14E-2	6.13E-2
PM	disease inc.	1.55E-8	5.13E-10	2.12E-10	1.62E-8	1.12E-10	6.98E-10	7.67E-12	-7.31E-9	9.72E-9
IR	kBq U-235 eq	2.15E-3	3.88E-4	7.69E-5	2.61E-3	8.31E-5	4.08E-4	5.44E-6	-7.73E-4	2.33E-3
ETP-fw	CTUe	2.20E+0	7.16E-2	1.77E-1	2.45E+0	1.54E-2	2.19E-1	2.38E-3	-9.27E-1	1.76E+0
HTP-c	CTUh	8.39E-11	2.60E-12	6.93E-12	9.34E-11	5.49E-13	1.81E-11	2.98E-14	-2.10E-11	9.11E-11
HTP-nc	CTUh	1.38E-9	8.47E-11	1.58E-10	1.63E-9	1.84E-11	2.36E-10	9.57E-13	-5.25E-10	1.36E-9
SQP	Pt	6.60E-1	7.41E-2	2.18E-2	7.56E-1	1.63E-2	9.95E-2	2.86E-3	-1.89E+0	-1.02E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.42E-1	1.25E-3	4.28E-1	5.71E-1	2.73E-4	6.39E-3	5.20E-5	-3.53E-1	2.25E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.42E-1	1.25E-3	4.28E-1	5.71E-1	2.73E-4	6.39E-3	5.20E-5	-3.53E-1	2.25E-1
PENRE	MJ	5.58E+0	9.42E-2	5.37E-2	5.73E+0	2.02E-2	1.39E-1	1.19E-3	-2.83E+0	3.06E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.58E+0	9.42E-2	5.37E-2	5.73E+0	2.02E-2	1.39E-1	1.19E-3	-2.83E+0	3.06E+0
PET	MJ	5.72E+0	9.55E-2	4.81E-1	6.30E+0	2.05E-2	1.45E-1	1.25E-3	-3.18E+0	3.28E+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	2.86E-3	9.88E-6	3.97E-5	2.91E-3	2.15E-6	9.00E-5	1.40E-6	-1.48E-3	1.53E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.30E-7	2.23E-7	3.43E-10	1.05E-6	4.86E-8	2.32E-7	1.34E-9	-4.79E-7	8.56E-7
NHWD	kg	1.81E-2	5.35E-3	1.05E-5	2.35E-2	1.18E-3	6.41E-3	4.91E-3	-2.45E-3	3.35E-2
RWD	kg	2.55E-6	6.04E-7	2.57E-10	3.16E-6	1.29E-7	5.19E-7	7.42E-9	-7.84E-7	3.03E-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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