

Environmental Profile

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

Ecochain v3.5.71



Product: 3030707 - Hep20 Tank Connector 22x3/4
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	5.03E-1	3.37E-3	3.14E-2	5.38E-1	1.53E-3	6.09E-2	7.10E-4	-2.64E-1	3.37E-1
GWP-f	kg CO2 eq	5.02E-1	3.37E-3	2.93E-2	5.35E-1	1.53E-3	6.09E-2	7.10E-4	-2.64E-1	3.34E-1
GWP-b	kg CO2 eq	1.23E-3	1.98E-6	2.09E-3	3.33E-3	9.29E-7	-5.51E-5	7.04E-7	-4.55E-4	2.82E-3
GWP-luluc	kg CO2 eq	3.57E-5	1.22E-6	1.29E-5	4.98E-5	5.41E-7	8.52E-6	1.46E-8	-1.56E-6	5.73E-5
ODP	kg CFC11 eq	8.31E-9	7.75E-10	3.20E-9	1.23E-8	3.52E-10	1.24E-9	1.94E-11	-2.62E-9	1.13E-8
AP	mol H+ eq	2.39E-3	2.14E-5	7.88E-5	2.49E-3	8.71E-6	4.99E-5	4.84E-7	-9.19E-4	1.63E-3
EP-fw	kg P eq	1.47E-5	2.74E-8	2.23E-7	1.50E-5	1.26E-8	2.51E-7	6.59E-10	-2.66E-6	1.26E-5
EP-m	kg N eq	6.32E-4	7.37E-6	1.59E-5	6.55E-4	3.12E-6	1.50E-5	8.74E-7	-2.09E-4	4.65E-4
EP-T	mol N eq	4.23E-3	8.13E-5	1.57E-4	4.47E-3	3.44E-5	1.64E-4	1.92E-6	-2.07E-3	2.60E-3
POCP	kg NMVOC eq	1.39E-3	2.30E-5	5.06E-5	1.47E-3	9.82E-6	5.01E-5	6.98E-7	-7.25E-4	8.04E-4
ADP-mm	kg Sb eq	1.16E-5	8.57E-8	3.55E-7	1.21E-5	3.96E-8	1.83E-7	4.80E-10	-1.85E-6	1.04E-5
ADP-f	MJ	7.00E+0	5.16E-2	4.06E-1	7.46E+0	2.35E-2	1.46E-1	1.43E-3	-3.20E+0	4.43E+0
WDP	m3 depriv.	3.99E-1	1.56E-4	4.29E-3	4.04E-1	7.20E-5	3.23E-3	9.48E-6	-7.25E-2	3.34E-1
PM	disease inc.	1.94E-8	3.00E-10	5.78E-10	2.03E-8	1.38E-10	7.55E-10	9.76E-12	-8.52E-9	1.27E-8
IR	kBq U-235 eq	3.17E-3	2.25E-4	3.61E-4	3.76E-3	1.03E-4	4.43E-4	6.84E-6	-1.96E-4	4.11E-3
ETP-fw	CTUe	1.69E+0	4.17E-2	4.19E-1	2.15E+0	1.91E-2	2.52E-1	2.92E-3	-1.97E-1	2.23E+0
HTP-c	CTUh	1.29E-10	1.50E-12	1.72E-11	1.48E-10	6.78E-13	2.17E-11	3.99E-14	-2.17E-11	1.49E-10
HTP-nc	CTUh	1.84E-9	4.94E-11	3.68E-10	2.26E-9	2.27E-11	2.73E-10	1.21E-12	-4.56E-10	2.10E-9
SQP	Pt	3.98E-1	4.34E-2	5.75E-2	4.99E-1	2.01E-2	1.14E-1	3.62E-3	-1.82E-2	6.18E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.12E-1	7.31E-4	8.53E-1	9.66E-1	3.37E-4	7.40E-3	6.39E-5	-1.59E-2	9.58E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.12E-1	7.31E-4	8.53E-1	9.66E-1	3.37E-4	7.40E-3	6.39E-5	-1.59E-2	9.58E-1
PENRE	MJ	7.54E+0	5.47E-2	4.44E-1	8.04E+0	2.49E-2	1.56E-1	1.52E-3	-3.47E+0	4.74E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.54E+0	5.47E-2	4.44E-1	8.04E+0	2.49E-2	1.56E-1	1.52E-3	-3.47E+0	4.74E+0
PET	MJ	7.65E+0	5.55E-2	1.30E+0	9.00E+0	2.53E-2	1.63E-1	1.58E-3	-3.49E+0	5.70E+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	9.39E-3	5.77E-6	1.31E-4	9.53E-3	2.66E-6	1.14E-4	1.77E-6	-1.70E-3	7.95E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.02E-6	1.30E-7	4.05E-7	1.55E-6	6.00E-8	2.56E-7	1.73E-9	-4.75E-7	1.40E-6
NHWD	kg	2.67E-2	3.13E-3	1.89E-3	3.18E-2	1.46E-3	7.45E-3	6.21E-3	-2.25E-3	4.46E-2
RWD	kg	3.92E-6	3.51E-7	3.07E-7	4.58E-6	1.60E-7	5.55E-7	9.39E-9	-2.60E-7	5.04E-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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