

Environmental Profile

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

Ecochain v3.5.71



Product: 3029608 - Hep20 Hand Titan Tap Connector WT 15x3/4
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	2.51E-1	2.02E-3	1.52E-2	2.69E-1	7.38E-4	3.63E-2	3.32E-4	-1.32E-1	1.74E-1
GWP-f	kg CO2 eq	2.55E-1	2.02E-3	1.42E-2	2.71E-1	7.38E-4	2.51E-2	3.32E-4	-1.35E-1	1.62E-1
GWP-b	kg CO2 eq	-3.64E-3	1.18E-6	1.01E-3	-2.63E-3	4.48E-7	1.12E-2	3.30E-7	3.57E-3	1.21E-2
GWP-luluc	kg CO2 eq	5.51E-5	7.27E-7	6.35E-6	6.21E-5	2.61E-7	2.52E-6	6.72E-9	-5.20E-5	1.30E-5
ODP	kg CFC11 eq	3.52E-9	4.63E-10	1.55E-9	5.53E-9	1.70E-10	6.45E-10	9.07E-12	-1.60E-9	4.75E-9
AP	mol H+ eq	1.17E-3	1.28E-5	3.87E-5	1.22E-3	4.20E-6	2.43E-5	2.26E-7	-4.95E-4	7.55E-4
EP-fw	kg P eq	7.47E-6	1.64E-8	1.09E-7	7.59E-6	6.07E-9	1.06E-7	3.05E-10	-1.99E-6	5.72E-6
EP-m	kg N eq	3.23E-4	4.41E-6	7.75E-6	3.35E-4	1.50E-6	7.61E-6	4.13E-7	-1.13E-4	2.31E-4
EP-T	mol N eq	2.20E-3	4.87E-5	7.70E-5	2.33E-3	1.66E-5	8.27E-5	8.96E-7	-1.13E-3	1.29E-3
POCP	kg NMVOC eq	7.08E-4	1.38E-5	2.47E-5	7.46E-4	4.74E-6	2.45E-5	3.26E-7	-3.86E-4	3.90E-4
ADP-mm	kg Sb eq	3.79E-6	5.12E-8	1.75E-7	4.02E-6	1.91E-8	9.62E-8	2.23E-10	-9.18E-7	3.22E-6
ADP-f	MJ	3.46E+0	3.08E-2	1.97E-1	3.69E+0	1.13E-2	6.93E-2	6.68E-4	-1.64E+0	2.14E+0
WDP	m3 depriv.	1.94E-1	9.35E-5	2.10E-3	1.96E-1	3.48E-5	1.44E-3	4.05E-6	-4.72E-2	1.50E-1
PM	disease inc.	9.96E-9	1.79E-10	2.84E-10	1.04E-8	6.66E-11	3.53E-10	4.56E-12	-4.97E-9	5.87E-9
IR	kBq U-235 eq	1.33E-3	1.35E-4	1.76E-4	1.64E-3	4.95E-5	2.22E-4	3.20E-6	-5.25E-4	1.39E-3
ETP-fw	CTUe	1.58E+0	2.49E-2	2.06E-1	1.81E+0	9.20E-3	1.17E-1	1.38E-3	-6.53E-1	1.28E+0
HTP-c	CTUh	5.99E-11	8.99E-13	8.47E-12	6.92E-11	3.27E-13	1.00E-11	1.84E-14	-1.51E-11	6.45E-11
HTP-nc	CTUh	8.98E-10	2.95E-11	1.81E-10	1.11E-9	1.10E-11	1.32E-10	5.65E-13	-3.73E-10	8.79E-10
SQP	Pt	8.12E-1	2.59E-2	2.83E-2	8.66E-1	9.69E-3	-2.36E-1	1.69E-3	-1.34E+0	-6.98E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.61E-1	4.37E-4	4.22E-1	5.83E-1	1.62E-4	-3.92E-2	3.01E-5	-2.50E-1	2.94E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.61E-1	4.37E-4	4.22E-1	5.83E-1	1.62E-4	-3.92E-2	3.01E-5	-2.50E-1	2.94E-1
PENRE	MJ	3.73E+0	3.27E-2	2.16E-1	3.98E+0	1.20E-2	7.38E-2	7.09E-4	-1.77E+0	2.29E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.73E+0	3.27E-2	2.16E-1	3.98E+0	1.20E-2	7.38E-2	7.09E-4	-1.77E+0	2.29E+0
PET	MJ	3.89E+0	3.32E-2	6.37E-1	4.56E+0	1.22E-2	3.46E-2	7.39E-4	-2.02E+0	2.59E+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	4.58E-3	3.45E-6	6.40E-5	4.64E-3	1.28E-6	4.80E-5	8.27E-7	-1.13E-3	3.56E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.44E-7	7.78E-8	1.96E-7	8.18E-7	2.90E-8	1.18E-7	8.05E-10	-2.88E-7	6.77E-7
NHWD	kg	1.24E-2	1.87E-3	9.15E-4	1.52E-2	7.02E-4	3.71E-3	2.90E-3	-1.69E-3	2.08E-2
RWD	kg	1.56E-6	2.10E-7	1.48E-7	1.92E-6	7.70E-8	2.86E-7	4.39E-9	-5.26E-7	1.76E-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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