

Environmental Profile

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

Ecochain v3.5.71



Product: 3029606 - Hep20 Hand Titan Tap Connector W 10x1/2
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	1.70E-1	1.29E-3	9.37E-3	1.81E-1	5.15E-4	2.65E-2	2.41E-4	-8.88E-2	1.19E-1
GWP-f	kg CO2 eq	1.72E-1	1.29E-3	8.72E-3	1.82E-1	5.14E-4	2.12E-2	2.41E-4	-9.00E-2	1.14E-1
GWP-b	kg CO2 eq	-1.79E-3	7.59E-7	6.50E-4	-1.13E-3	3.12E-7	5.36E-3	2.38E-7	1.22E-3	5.44E-3
GWP-luluc	kg CO2 eq	3.14E-5	4.66E-7	3.53E-6	3.54E-5	1.82E-7	1.99E-6	4.94E-9	-2.26E-5	1.50E-5
ODP	kg CFC11 eq	3.41E-9	2.97E-10	9.76E-10	4.69E-9	1.19E-10	4.27E-10	6.57E-12	-1.14E-9	4.09E-9
AP	mol H+ eq	8.21E-4	8.22E-6	2.21E-5	8.51E-4	2.93E-6	1.66E-5	1.64E-7	-3.22E-4	5.49E-4
EP-fw	kg P eq	5.08E-6	1.05E-8	6.35E-8	5.15E-6	4.23E-9	7.43E-8	2.23E-10	-1.16E-6	4.07E-6
EP-m	kg N eq	2.16E-4	2.83E-6	4.59E-6	2.23E-4	1.05E-6	5.17E-6	2.96E-7	-7.32E-5	1.56E-4
EP-T	mol N eq	1.48E-3	3.12E-5	4.49E-5	1.56E-3	1.16E-5	5.63E-5	6.50E-7	-7.32E-4	8.92E-4
POCP	kg NMVOC eq	4.85E-4	8.84E-6	1.45E-5	5.08E-4	3.30E-6	1.67E-5	2.36E-7	-2.52E-4	2.76E-4
ADP-mm	kg Sb eq	4.26E-6	3.29E-8	9.65E-8	4.39E-6	1.33E-8	6.31E-8	1.63E-10	-6.49E-7	3.82E-6
ADP-f	MJ	2.40E+0	1.98E-2	1.22E-1	2.54E+0	7.89E-3	4.71E-2	4.84E-4	-1.10E+0	1.49E+0
WDP	m3 depriv.	1.33E-1	6.00E-5	1.24E-3	1.34E-1	2.42E-5	1.03E-3	3.20E-6	-2.87E-2	1.06E-1
PM	disease inc.	6.84E-9	1.15E-10	1.62E-10	7.11E-9	4.64E-11	2.39E-10	3.30E-12	-3.14E-9	4.26E-9
IR	kBq U-235 eq	1.29E-3	8.64E-5	1.06E-4	1.48E-3	3.45E-5	1.48E-4	2.32E-6	-2.64E-4	1.40E-3
ETP-fw	CTUe	9.81E-1	1.60E-2	1.16E-1	1.11E+0	6.41E-3	8.43E-2	9.91E-4	-3.07E-1	8.98E-1
HTP-c	CTUh	4.62E-11	5.76E-13	4.78E-12	5.15E-11	2.28E-13	6.94E-12	1.35E-14	-9.13E-12	4.96E-11
HTP-nc	CTUh	6.79E-10	1.89E-11	1.01E-10	7.99E-10	7.64E-12	9.10E-11	4.08E-13	-2.15E-10	6.83E-10
SQP	Pt	4.49E-1	1.66E-2	1.61E-2	4.81E-1	6.75E-3	-1.09E-1	1.23E-3	-5.78E-1	-1.98E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.14E-2	2.80E-4	2.30E-1	3.22E-1	1.13E-4	-1.89E-2	2.17E-5	-1.10E-1	1.94E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.14E-2	2.80E-4	2.30E-1	3.22E-1	1.13E-4	-1.89E-2	2.17E-5	-1.10E-1	1.94E-1
PENRE	MJ	2.58E+0	2.10E-2	1.34E-1	2.74E+0	8.38E-3	5.02E-2	5.14E-4	-1.20E+0	1.60E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.58E+0	2.10E-2	1.34E-1	2.74E+0	8.38E-3	5.02E-2	5.14E-4	-1.20E+0	1.60E+0
PET	MJ	2.68E+0	2.13E-2	3.64E-1	3.06E+0	8.49E-3	3.12E-2	5.35E-4	-1.31E+0	1.80E+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	3.14E-3	2.21E-6	3.73E-5	3.18E-3	8.93E-7	3.81E-5	5.98E-7	-6.84E-4	2.53E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.23E-7	4.99E-8	1.26E-7	5.98E-7	2.02E-8	8.26E-8	5.86E-10	-2.05E-7	4.97E-7
NHWD	kg	9.65E-3	1.20E-3	5.87E-4	1.14E-2	4.89E-4	2.55E-3	2.10E-3	-1.00E-3	1.56E-2
RWD	kg	1.58E-6	1.35E-7	9.51E-8	1.81E-6	5.37E-8	1.89E-7	3.18E-9	-2.78E-7	1.78E-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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