

Environmental Profile

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

Ecochain v3.5.71



Product: 3029607 - Hep20 Hand Titan Tap Connector WT 15x1/2
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	2.18E-1	1.91E-3	1.35E-2	2.34E-1	6.46E-4	3.07E-2	2.98E-4	-1.13E-1	1.53E-1
GWP-f	kg CO2 eq	2.20E-1	1.90E-3	1.26E-2	2.35E-1	6.46E-4	2.49E-2	2.98E-4	-1.15E-1	1.46E-1
GWP-b	kg CO2 eq	-1.65E-3	1.11E-6	8.64E-4	-7.89E-4	3.92E-7	5.81E-3	2.96E-7	2.23E-3	7.25E-3
GWP-luluc	kg CO2 eq	3.83E-5	6.87E-7	5.99E-6	4.50E-5	2.29E-7	2.79E-6	6.05E-9	-3.00E-5	1.80E-5
ODP	kg CFC11 eq	3.72E-9	4.37E-10	1.35E-9	5.51E-9	1.49E-10	5.51E-10	8.13E-12	-1.38E-9	4.84E-9
AP	mol H+ eq	1.02E-3	1.22E-5	3.59E-5	1.07E-3	3.68E-6	2.14E-5	2.03E-7	-4.13E-4	6.85E-4
EP-fw	kg P eq	5.97E-6	1.54E-8	1.00E-7	6.08E-6	5.31E-9	9.80E-8	2.74E-10	-1.51E-6	4.68E-6
EP-m	kg N eq	2.64E-4	4.18E-6	7.04E-6	2.76E-4	1.32E-6	6.63E-6	3.69E-7	-9.41E-5	1.90E-4
EP-T	mol N eq	1.90E-3	4.61E-5	7.07E-5	2.01E-3	1.45E-5	7.23E-5	8.04E-7	-9.41E-4	1.16E-3
POCP	kg NMVOC eq	6.24E-4	1.31E-5	2.26E-5	6.59E-4	4.15E-6	2.16E-5	2.92E-7	-3.23E-4	3.63E-4
ADP-mm	kg Sb eq	4.70E-6	4.83E-8	1.66E-7	4.91E-6	1.67E-8	8.18E-8	2.00E-10	-8.10E-7	4.20E-6
ADP-f	MJ	2.99E+0	2.91E-2	1.74E-1	3.19E+0	9.91E-3	6.12E-2	5.99E-4	-1.40E+0	1.86E+0
WDP	m3 depriv.	1.55E-1	8.82E-5	1.91E-3	1.57E-1	3.04E-5	1.31E-3	3.73E-6	-3.72E-2	1.21E-1
PM	disease inc.	8.63E-9	1.69E-10	2.63E-10	9.06E-9	5.83E-11	3.15E-10	4.09E-12	-4.04E-9	5.40E-9
IR	kBq U-235 eq	1.41E-3	1.27E-4	1.58E-4	1.69E-3	4.33E-5	1.92E-4	2.87E-6	-3.37E-4	1.59E-3
ETP-fw	CTUe	1.19E+0	2.35E-2	1.94E-1	1.41E+0	8.05E-3	1.06E-1	1.23E-3	-4.03E-1	1.12E+0
HTP-c	CTUh	5.49E-11	8.48E-13	7.92E-12	6.37E-11	2.86E-13	8.91E-12	1.65E-14	-1.17E-11	6.11E-11
HTP-nc	CTUh	8.21E-10	2.79E-11	1.70E-10	1.02E-9	9.60E-12	1.16E-10	5.06E-13	-2.78E-10	8.67E-10
SQP	Pt	5.09E-1	2.44E-2	2.63E-2	5.60E-1	8.48E-3	-9.78E-2	1.52E-3	-7.68E-1	-2.95E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.05E-1	4.12E-4	4.02E-1	5.08E-1	1.42E-4	-1.82E-2	2.70E-5	-1.45E-1	3.45E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.05E-1	4.12E-4	4.02E-1	5.08E-1	1.42E-4	-1.82E-2	2.70E-5	-1.45E-1	3.45E-1
PENRE	MJ	3.22E+0	3.09E-2	1.90E-1	3.44E+0	1.05E-2	6.52E-2	6.36E-4	-1.52E+0	2.00E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.22E+0	3.09E-2	1.90E-1	3.44E+0	1.05E-2	6.52E-2	6.36E-4	-1.52E+0	2.00E+0
PET	MJ	3.32E+0	3.13E-2	5.92E-1	3.95E+0	1.07E-2	4.69E-2	6.63E-4	-1.66E+0	2.34E+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	3.67E-3	3.25E-6	5.86E-5	3.74E-3	1.12E-6	4.64E-5	7.42E-7	-8.86E-4	2.90E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.94E-7	7.33E-8	1.68E-7	7.35E-7	2.54E-8	1.07E-7	7.23E-10	-2.47E-7	6.20E-7
NHWD	kg	1.14E-2	1.77E-3	7.85E-4	1.40E-2	6.15E-4	3.23E-3	2.60E-3	-1.29E-3	1.91E-2
RWD	kg	1.71E-6	1.98E-7	1.27E-7	2.03E-6	6.74E-8	2.45E-7	3.94E-9	-3.50E-7	2.00E-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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