

Environmental Profile

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

Ecochain v3.5.71



Product: 3029609 - Hep20 Hand Titan Tap Connector WT 22x3/4
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

This document and supporting material contain confidential and proprietary business information of Wavin - UK - Doncaster - Verified. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - UK - Doncaster - Verified.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.76E-1	3.36E-3	2.05E-2	4.00E-1	1.09E-3	4.84E-2	4.92E-4	-1.96E-1	2.54E-1
GWP-f	kg CO2 eq	3.80E-1	3.35E-3	1.90E-2	4.02E-1	1.09E-3	3.72E-2	4.92E-4	-2.00E-1	2.41E-1
GWP-b	kg CO2 eq	-3.36E-3	1.96E-6	1.45E-3	-1.92E-3	6.64E-7	1.12E-2	4.91E-7	3.46E-3	1.27E-2
GWP-luluc	kg CO2 eq	5.97E-5	1.21E-6	7.42E-6	6.83E-5	3.87E-7	4.56E-6	9.84E-9	-5.23E-5	2.10E-5
ODP	kg CFC11 eq	4.61E-9	7.70E-10	2.15E-9	7.54E-9	2.52E-10	9.38E-10	1.34E-11	-2.13E-9	6.61E-9
AP	mol H+ eq	1.69E-3	2.15E-5	4.70E-5	1.76E-3	6.23E-6	3.59E-5	3.34E-7	-7.20E-4	1.09E-3
EP-fw	kg P eq	1.00E-5	2.72E-8	1.36E-7	1.02E-5	9.00E-9	1.65E-7	4.48E-10	-2.66E-6	7.70E-6
EP-m	kg N eq	4.55E-4	7.39E-6	9.89E-6	4.72E-4	2.23E-6	1.11E-5	6.18E-7	-1.65E-4	3.21E-4
EP-T	mol N eq	3.25E-3	8.15E-5	9.61E-5	3.43E-3	2.46E-5	1.21E-4	1.33E-6	-1.65E-3	1.93E-3
POCP	kg NMVOC eq	1.06E-3	2.31E-5	3.11E-5	1.11E-3	7.02E-6	3.62E-5	4.83E-7	-5.62E-4	5.96E-4
ADP-mm	kg Sb eq	5.77E-6	8.50E-8	2.02E-7	6.06E-6	2.83E-8	1.40E-7	3.29E-10	-1.35E-6	4.88E-6
ADP-f	MJ	5.05E+0	5.12E-2	2.67E-1	5.37E+0	1.68E-2	1.04E-1	9.90E-4	-2.40E+0	3.09E+0
WDP	m3 depriv.	2.63E-1	1.55E-4	2.67E-3	2.65E-1	5.15E-5	2.19E-3	5.53E-6	-6.55E-2	2.02E-1
PM	disease inc.	1.45E-8	2.97E-10	3.45E-10	1.52E-8	9.87E-11	5.32E-10	6.75E-12	-7.06E-9	8.75E-9
IR	kBq U-235 eq	1.74E-3	2.24E-4	2.29E-4	2.19E-3	7.34E-5	3.28E-4	4.76E-6	-5.61E-4	2.04E-3
ETP-fw	CTUe	1.83E+0	4.14E-2	2.44E-1	2.12E+0	1.36E-2	1.74E-1	2.06E-3	-6.99E-1	1.61E+0
HTP-c	CTUh	8.11E-11	1.49E-12	1.01E-11	9.27E-11	4.85E-13	1.48E-11	2.69E-14	-2.04E-11	8.76E-11
HTP-nc	CTUh	1.24E-9	4.91E-11	2.14E-10	1.50E-9	1.62E-11	1.95E-10	8.38E-13	-4.84E-10	1.23E-9
SQP	Pt	8.69E-1	4.30E-2	3.42E-2	9.47E-1	1.44E-2	-2.09E-1	2.51E-3	-1.34E+0	-5.89E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.78E-1	7.26E-4	4.80E-1	6.59E-1	2.41E-4	-3.74E-2	4.50E-5	-2.54E-1	3.68E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.78E-1	7.26E-4	4.80E-1	6.59E-1	2.41E-4	-3.74E-2	4.50E-5	-2.54E-1	3.68E-1
PENRE	MJ	5.44E+0	5.44E-2	2.93E-1	5.79E+0	1.78E-2	1.11E-1	1.05E-3	-2.60E+0	3.32E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.44E+0	5.44E-2	2.93E-1	5.79E+0	1.78E-2	1.11E-1	1.05E-3	-2.60E+0	3.32E+0
PET	MJ	5.62E+0	5.51E-2	7.73E-1	6.45E+0	1.81E-2	7.34E-2	1.09E-3	-2.85E+0	3.69E+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	6.20E-3	5.72E-6	8.01E-5	6.28E-3	1.90E-6	7.24E-5	1.23E-6	-1.56E-3	4.80E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.01E-7	1.29E-7	2.80E-7	1.11E-6	4.29E-8	1.77E-7	1.19E-9	-3.86E-7	9.45E-7
NHWD	kg	1.64E-2	3.11E-3	1.30E-3	2.08E-2	1.04E-3	5.44E-3	4.30E-3	-2.24E-3	2.93E-2
RWD	kg	2.07E-6	3.49E-7	2.11E-7	2.63E-6	1.14E-7	4.18E-7	6.51E-9	-5.74E-7	2.59E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777