

Environmental Profile

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

Ecochain v3.5.71



Product: 3030667 - Hep20 Brass Adapter 15x1/2 PF/TM
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	4.05E-1	1.35E-2	3.47E-2	4.53E-1	2.03E-3	2.47E-2	1.83E-4	-1.26E-1	3.54E-1
GWP-f	kg CO2 eq	4.09E-1	1.35E-2	3.19E-2	4.54E-1	2.03E-3	1.45E-2	1.83E-4	-1.26E-1	3.45E-1
GWP-b	kg CO2 eq	-4.13E-3	-1.96E-6	2.76E-3	-1.37E-3	1.23E-6	1.02E-2	2.17E-7	2.62E-4	9.11E-3
GWP-luluc	kg CO2 eq	4.94E-4	8.55E-6	8.71E-6	5.11E-4	7.18E-7	1.31E-6	1.24E-8	-1.72E-4	3.41E-4
ODP	kg CFC11 eq	2.16E-8	2.78E-9	3.90E-9	2.82E-8	4.67E-10	4.58E-10	1.82E-11	-6.25E-9	2.29E-8
AP	mol H+ eq	2.66E-2	3.77E-4	6.23E-5	2.71E-2	1.15E-5	2.40E-5	4.26E-7	-2.17E-3	2.49E-2
EP-fw	kg P eq	2.11E-4	6.51E-8	1.94E-7	2.12E-4	1.67E-8	1.11E-7	5.17E-10	-1.77E-5	1.94E-4
EP-m	kg N eq	1.43E-3	9.41E-5	1.49E-5	1.54E-3	4.13E-6	6.45E-6	3.02E-7	-2.69E-4	1.28E-3
EP-T	mol N eq	2.06E-2	1.05E-3	1.37E-4	2.18E-2	4.55E-5	7.22E-5	1.63E-6	-3.61E-3	1.83E-2
POCP	kg NMVOC eq	5.53E-3	2.72E-4	4.52E-5	5.85E-3	1.30E-5	2.00E-5	5.04E-7	-8.74E-4	5.01E-3
ADP-mm	kg Sb eq	1.68E-3	1.44E-7	2.27E-7	1.68E-3	5.25E-8	1.04E-7	4.12E-10	-7.82E-4	8.96E-4
ADP-f	MJ	4.81E+0	1.79E-1	4.61E-1	5.45E+0	3.11E-2	4.33E-2	1.26E-3	-1.64E+0	3.89E+0
WDP	m3 depriv.	2.87E-1	3.19E-4	4.00E-3	2.91E-1	9.55E-5	5.49E-4	4.43E-5	-8.74E-2	2.04E-1
PM	disease inc.	6.26E-8	5.55E-10	4.57E-10	6.37E-8	1.83E-10	3.25E-10	8.34E-12	-9.35E-9	5.48E-8
IR	kBq U-235 eq	1.46E-2	7.70E-4	3.64E-4	1.58E-2	1.36E-4	1.73E-4	5.37E-6	-5.92E-3	1.02E-2
ETP-fw	CTUe	2.60E+2	1.21E-1	2.99E-1	2.60E+2	2.53E-2	1.23E-1	1.25E-3	-3.70E+1	2.23E+2
HTP-c	CTUh	3.78E-9	7.37E-12	1.28E-11	3.80E-9	8.99E-13	5.40E-12	2.23E-14	-8.26E-10	2.99E-9
HTP-nc	CTUh	3.03E-7	1.08E-10	2.58E-10	3.04E-7	3.01E-11	1.35E-10	6.95E-13	-5.25E-8	2.51E-7
SQP	Pt	4.65E+0	5.01E-2	4.46E-2	4.75E+0	2.66E-2	-2.36E-1	2.77E-3	-1.69E+0	2.85E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.51E-1	1.48E-3	5.13E-1	1.47E+0	4.47E-4	-3.88E-2	2.15E-5	-3.95E-1	1.03E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.51E-1	1.48E-3	5.13E-1	1.47E+0	4.47E-4	-3.88E-2	2.15E-5	-3.95E-1	1.03E+0
PENRE	MJ	5.15E+0	1.90E-1	5.07E-1	5.84E+0	3.30E-2	4.61E-2	1.33E-3	-1.76E+0	4.17E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.15E+0	1.90E-1	5.07E-1	5.84E+0	3.30E-2	4.61E-2	1.33E-3	-1.76E+0	4.17E+0
PET	MJ	6.10E+0	1.91E-1	1.02E+0	7.31E+0	3.35E-2	7.22E-3	1.35E-3	-2.15E+0	5.20E+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	7.53E-3	1.15E-5	1.15E-4	7.65E-3	3.52E-6	2.55E-5	1.39E-6	-2.32E-3	5.36E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.09E-4	2.22E-7	5.31E-7	2.10E-4	7.96E-8	9.56E-8	1.79E-9	-9.82E-5	1.12E-4
NHWD	kg	1.07E-1	2.56E-3	2.47E-3	1.12E-1	1.93E-3	2.18E-3	7.80E-3	-3.47E-2	8.88E-2
RWD	kg	1.27E-5	1.24E-6	4.02E-7	1.43E-5	2.12E-7	2.20E-7	8.25E-9	-4.78E-6	9.96E-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