

Environmental Profile

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

Ecochain v3.5.71



Product: 3038721 - Irish Acorn Pb Straight Connector W 3/4i
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



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	4.79E-1	6.15E-3	4.11E-2	5.26E-1	1.61E-3	5.37E-2	7.20E-4	-2.42E-1	3.40E-1
GWP-f	kg CO2 eq	4.78E-1	6.15E-3	3.88E-2	5.23E-1	1.61E-3	5.37E-2	7.20E-4	-2.42E-1	3.37E-1
GWP-b	kg CO2 eq	9.68E-4	3.55E-6	2.25E-3	3.22E-3	9.76E-7	-6.08E-5	7.24E-7	-5.03E-4	2.66E-3
GWP-luluc	kg CO2 eq	2.24E-5	2.24E-6	2.29E-5	4.76E-5	5.69E-7	9.22E-6	1.40E-8	-1.20E-6	5.62E-5
ODP	kg CFC11 eq	4.88E-9	1.41E-9	3.80E-9	1.01E-8	3.70E-10	1.33E-9	1.97E-11	-2.32E-9	9.49E-9
AP	mol H+ eq	2.17E-3	4.10E-5	1.31E-4	2.34E-3	9.15E-6	5.27E-5	4.88E-7	-9.04E-4	1.50E-3
EP-fw	kg P eq	5.42E-6	4.96E-8	3.50E-7	5.82E-6	1.32E-8	2.71E-7	6.45E-10	-2.10E-6	4.00E-6
EP-m	kg N eq	4.03E-4	1.39E-5	2.37E-5	4.41E-4	3.28E-6	1.57E-5	9.23E-7	-1.88E-4	2.73E-4
EP-T	mol N eq	4.10E-3	1.53E-4	2.46E-4	4.50E-3	3.61E-5	1.72E-4	1.94E-6	-1.89E-3	2.82E-3
POCP	kg NMVOC eq	1.54E-3	4.32E-5	7.80E-5	1.66E-3	1.03E-5	5.28E-5	7.06E-7	-7.14E-4	1.01E-3
ADP-mm	kg Sb eq	8.68E-6	1.55E-7	6.47E-7	9.48E-6	4.16E-8	1.98E-7	4.76E-10	-1.37E-6	8.35E-6
ADP-f	MJ	6.47E+0	9.38E-2	5.19E-1	7.08E+0	2.47E-2	1.57E-1	1.45E-3	-3.27E+0	3.99E+0
WDP	m3 depriv.	1.45E-1	2.83E-4	6.43E-3	1.51E-1	7.57E-5	3.38E-3	6.69E-6	-5.99E-2	9.50E-2
PM	disease inc.	1.88E-8	5.42E-10	9.57E-10	2.03E-8	1.45E-10	8.13E-10	9.87E-12	-8.24E-9	1.30E-8
IR	kBq U-235 eq	1.83E-3	4.10E-4	5.11E-4	2.75E-3	1.08E-4	4.78E-4	6.99E-6	-1.49E-4	3.19E-3
ETP-fw	CTUe	1.05E+0	7.57E-2	7.30E-1	1.85E+0	2.00E-2	2.57E-1	3.06E-3	-1.70E-1	1.96E+0
HTP-c	CTUh	9.36E-11	2.75E-12	2.94E-11	1.26E-10	7.13E-13	2.18E-11	3.84E-14	-1.92E-11	1.29E-10
HTP-nc	CTUh	1.51E-9	8.95E-11	6.45E-10	2.24E-9	2.39E-11	2.85E-10	1.23E-12	-4.11E-10	2.14E-9
SQP	Pt	2.78E-1	7.82E-2	9.63E-2	4.52E-1	2.11E-2	1.23E-1	3.68E-3	-1.49E-2	5.85E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.50E-2	1.32E-3	1.59E+0	1.66E+0	3.54E-4	7.98E-3	6.69E-5	-1.56E-2	1.65E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.50E-2	1.32E-3	1.59E+0	1.66E+0	3.54E-4	7.98E-3	6.69E-5	-1.56E-2	1.65E+0
PENRE	MJ	6.98E+0	9.96E-2	5.66E-1	7.64E+0	2.62E-2	1.68E-1	1.53E-3	-3.54E+0	4.30E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.98E+0	9.96E-2	5.66E-1	7.64E+0	2.62E-2	1.68E-1	1.53E-3	-3.54E+0	4.30E+0
PET	MJ	7.04E+0	1.01E-1	2.16E+0	9.30E+0	2.65E-2	1.76E-1	1.60E-3	-3.56E+0	5.94E+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	3.43E-3	1.04E-5	2.03E-4	3.64E-3	2.79E-6	1.09E-4	1.80E-6	-1.40E-3	2.36E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.62E-7	2.35E-7	4.40E-7	1.44E-6	6.31E-8	2.67E-7	1.73E-9	-4.29E-7	1.34E-6
NHWD	kg	1.91E-2	5.65E-3	2.07E-3	2.68E-2	1.53E-3	7.78E-3	6.31E-3	-2.10E-3	4.03E-2
RWD	kg	2.22E-6	6.39E-7	3.33E-7	3.19E-6	1.68E-7	5.98E-7	9.55E-9	-1.98E-7	3.77E-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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