

Environmental Profile

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

Ecochain v3.5.71



Product: 3038723 - Irish Acorn Pb Equal Tee W 1/2i
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	2.93E-1	3.00E-3	7.99E-1	1.10E+0	1.03E-3	7.92E-2	5.26E-4	-1.46E-1	1.03E+0
GWP-f	kg CO2 eq	2.94E-1	2.99E-3	7.99E-1	1.10E+0	1.03E-3	7.92E-2	5.26E-4	-1.46E-1	1.03E+0
GWP-b	kg CO2 eq	-6.05E-4	1.73E-6	-2.37E-4	-8.40E-4	6.26E-7	-3.09E-5	5.28E-7	-2.66E-4	-1.14E-3
GWP-luluc	kg CO2 eq	5.56E-5	1.09E-6	9.98E-4	1.05E-3	3.65E-7	5.41E-6	1.02E-8	-2.37E-6	1.06E-3
ODP	kg CFC11 eq	1.11E-8	6.87E-10	3.84E-8	5.02E-8	2.38E-10	8.50E-10	1.44E-11	-3.95E-9	4.74E-8
AP	mol H+ eq	1.40E-3	1.97E-5	5.03E-3	6.45E-3	5.87E-6	3.68E-5	3.56E-7	-4.92E-4	6.00E-3
EP-fw	kg P eq	4.36E-6	2.42E-8	1.21E-5	1.64E-5	8.49E-9	1.62E-7	4.71E-10	-1.03E-6	1.56E-5
EP-m	kg N eq	2.47E-4	6.71E-6	7.23E-4	9.76E-4	2.10E-6	1.17E-5	6.74E-7	-9.92E-5	8.91E-4
EP-T	mol N eq	2.59E-3	7.40E-5	8.46E-3	1.11E-2	2.32E-5	1.28E-4	1.42E-6	-1.01E-3	1.03E-2
POCP	kg NMVOC eq	1.04E-3	2.09E-5	2.59E-3	3.65E-3	6.62E-6	3.79E-5	5.16E-7	-3.96E-4	3.30E-3
ADP-mm	kg Sb eq	1.77E-5	7.55E-8	2.91E-5	4.69E-5	2.67E-8	1.19E-7	3.48E-10	-1.06E-6	4.60E-5
ADP-f	MJ	4.95E+0	4.57E-2	8.97E+0	1.40E+1	1.58E-2	9.56E-2	1.06E-3	-2.18E+0	1.19E+1
WDP	m3 depriv.	1.05E-1	1.38E-4	1.99E-1	3.04E-1	4.86E-5	2.31E-3	4.89E-6	-3.01E-2	2.77E-1
PM	disease inc.	1.28E-8	2.64E-10	3.68E-8	4.99E-8	9.31E-11	5.06E-10	7.20E-12	-4.36E-9	4.61E-8
IR	kBq U-235 eq	4.42E-3	2.00E-4	1.34E-2	1.81E-2	6.92E-5	2.91E-4	5.10E-6	-3.09E-4	1.81E-2
ETP-fw	CTUe	1.55E+0	3.69E-2	3.06E+1	3.22E+1	1.29E-2	2.01E-1	2.23E-3	-1.37E-1	3.23E+1
HTP-c	CTUh	7.14E-11	1.34E-12	1.20E-9	1.27E-9	4.57E-13	1.47E-11	2.80E-14	-1.17E-11	1.28E-9
HTP-nc	CTUh	1.38E-9	4.36E-11	2.74E-8	2.88E-8	1.53E-11	2.00E-10	8.99E-13	-2.42E-10	2.88E-8
SQP	Pt	4.49E-1	3.82E-2	3.77E+0	4.26E+0	1.35E-2	7.32E-2	2.68E-3	-2.52E-2	4.33E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.48E-2	6.45E-4	7.38E+1	7.39E+1	2.27E-4	4.78E-3	4.88E-5	-1.09E-2	7.39E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.48E-2	6.45E-4	7.38E+1	7.39E+1	2.27E-4	4.78E-3	4.88E-5	-1.09E-2	7.39E+1
PENRE	MJ	5.32E+0	4.85E-2	9.52E+0	1.49E+1	1.68E-2	1.02E-1	1.12E-3	-2.36E+0	1.26E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.32E+0	4.85E-2	9.52E+0	1.49E+1	1.68E-2	1.02E-1	1.12E-3	-2.36E+0	1.26E+1
PET	MJ	5.41E+0	4.91E-2	8.34E+1	8.88E+1	1.70E-2	1.07E-1	1.17E-3	-2.37E+0	8.66E+1
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	2.54E-3	5.09E-6	6.89E-3	9.44E-3	1.79E-6	1.05E-4	1.32E-6	-7.03E-4	8.84E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.14E-6	1.15E-7	3.51E-7	1.60E-6	4.05E-8	1.85E-7	1.26E-9	-7.20E-7	1.11E-6
NHWD	kg	1.48E-2	2.76E-3	3.16E-3	2.07E-2	9.81E-4	6.01E-3	4.60E-3	-1.31E-3	3.10E-2
RWD	kg	5.50E-6	3.11E-7	2.65E-7	6.08E-6	1.08E-7	3.65E-7	6.97E-9	-4.07E-7	6.15E-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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