

Environmental Profile

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

Ecochain v3.5.71



Product: 3038729 - Irish Pb Reduced Tee W 1X3/4X3/4i
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	8.37E-1	1.14E-2	6.75E-2	9.16E-1	2.90E-3	9.87E-2	1.30E-3	-4.23E-1	5.96E-1
GWP-f	kg CO2 eq	8.35E-1	1.14E-2	6.31E-2	9.10E-1	2.90E-3	9.88E-2	1.30E-3	-4.22E-1	5.91E-1
GWP-b	kg CO2 eq	1.71E-3	6.59E-6	4.32E-3	6.04E-3	1.76E-6	-1.09E-4	1.31E-6	-9.03E-4	5.03E-3
GWP-luluc	kg CO2 eq	4.27E-5	4.16E-6	3.00E-5	7.68E-5	1.03E-6	1.66E-5	2.54E-8	-2.22E-6	9.22E-5
ODP	kg CFC11 eq	9.37E-9	2.62E-9	6.74E-9	1.87E-8	6.68E-10	2.39E-9	3.56E-11	-4.26E-9	1.76E-8
AP	mol H+ eq	3.88E-3	7.64E-5	1.80E-4	4.14E-3	1.65E-5	9.50E-5	8.82E-7	-1.60E-3	2.65E-3
EP-fw	kg P eq	9.38E-6	9.22E-8	5.01E-7	9.97E-6	2.38E-8	4.87E-7	1.17E-9	-3.54E-6	6.95E-6
EP-m	kg N eq	7.03E-4	2.59E-5	3.52E-5	7.64E-4	5.91E-6	2.83E-5	1.67E-6	-3.25E-4	4.75E-4
EP-T	mol N eq	7.17E-3	2.85E-4	3.53E-4	7.81E-3	6.51E-5	3.10E-4	3.51E-6	-3.28E-3	4.91E-3
POCP	kg NMVOC eq	2.74E-3	8.05E-5	1.13E-4	2.94E-3	1.86E-5	9.53E-5	1.28E-6	-1.26E-3	1.79E-3
ADP-mm	kg Sb eq	1.63E-5	2.88E-7	8.31E-7	1.74E-5	7.50E-8	3.56E-7	8.62E-10	-2.35E-6	1.55E-5
ADP-f	MJ	1.16E+1	1.74E-1	8.69E-1	1.27E+1	4.45E-2	2.83E-1	2.62E-3	-5.85E+0	7.13E+0
WDP	m3 depriv.	2.51E-1	5.26E-4	9.53E-3	2.61E-1	1.37E-4	6.11E-3	1.21E-5	-1.02E-1	1.65E-1
PM	disease inc.	3.34E-8	1.01E-9	1.32E-9	3.57E-8	2.62E-10	1.46E-9	1.79E-11	-1.45E-8	2.30E-8
IR	kBq U-235 eq	3.52E-3	7.62E-4	7.91E-4	5.07E-3	1.94E-4	8.59E-4	1.26E-5	-2.77E-4	5.86E-3
ETP-fw	CTUe	1.94E+0	1.41E-1	9.69E-1	3.05E+0	3.61E-2	4.65E-1	5.53E-3	-2.97E-1	3.26E+0
HTP-c	CTUh	1.71E-10	5.10E-12	3.96E-11	2.16E-10	1.29E-12	3.92E-11	6.94E-14	-3.34E-11	2.23E-10
HTP-nc	CTUh	2.73E-9	1.66E-10	8.52E-10	3.75E-9	4.31E-11	5.14E-10	2.23E-12	-7.16E-10	3.60E-9
SQP	Pt	5.28E-1	1.45E-1	1.32E-1	8.05E-1	3.81E-2	2.21E-1	6.65E-3	-2.73E-2	1.04E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.21E-1	2.46E-3	2.01E+0	2.13E+0	6.38E-4	1.44E-2	1.21E-4	-2.78E-2	2.12E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.21E-1	2.46E-3	2.01E+0	2.13E+0	6.38E-4	1.44E-2	1.21E-4	-2.78E-2	2.12E+0
PENRE	MJ	1.25E+1	1.85E-1	9.50E-1	1.37E+1	4.72E-2	3.02E-1	2.78E-3	-6.33E+0	7.67E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.25E+1	1.85E-1	9.50E-1	1.37E+1	4.72E-2	3.02E-1	2.78E-3	-6.33E+0	7.67E+0
PET	MJ	1.26E+1	1.88E-1	2.96E+0	1.58E+1	4.79E-2	3.16E-1	2.90E-3	-6.36E+0	9.79E+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	5.96E-3	1.94E-5	2.93E-4	6.27E-3	5.03E-6	1.98E-4	3.26E-6	-2.38E-3	4.10E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.44E-6	4.37E-7	8.39E-7	2.71E-6	1.14E-7	4.82E-7	3.12E-9	-7.87E-7	2.53E-6
NHWD	kg	3.55E-2	1.05E-2	3.93E-3	4.99E-2	2.76E-3	1.40E-2	1.14E-2	-3.69E-3	7.44E-2
RWD	kg	4.30E-6	1.19E-6	6.34E-7	6.12E-6	3.03E-7	1.08E-6	1.73E-8	-3.69E-7	7.15E-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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