

Environmental Profile

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

Ecochain v3.5.71



Product: 3038730 - Irish Pb Reduced Tee W 3/4X1/2X1/2i
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

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	4.89E-1	6.40E-3	4.39E-2	5.39E-1	1.66E-3	5.98E-2	7.54E-4	-2.46E-1	3.55E-1
GWP-f	kg CO2 eq	4.88E-1	6.39E-3	4.15E-2	5.36E-1	1.66E-3	5.99E-2	7.54E-4	-2.46E-1	3.52E-1
GWP-b	kg CO2 eq	8.92E-4	3.69E-6	2.36E-3	3.25E-3	1.01E-6	-6.15E-5	7.58E-7	-5.10E-4	2.68E-3
GWP-luluc	kg CO2 eq	2.73E-5	2.33E-6	2.51E-5	5.47E-5	5.88E-7	9.42E-6	1.47E-8	-1.41E-6	6.33E-5
ODP	kg CFC11 eq	6.27E-9	1.47E-9	4.02E-9	1.18E-8	3.83E-10	1.36E-9	2.06E-11	-2.60E-9	1.09E-8
AP	mol H+ eq	2.24E-3	4.27E-5	1.42E-4	2.42E-3	9.46E-6	5.44E-5	5.11E-7	-9.17E-4	1.57E-3
EP-fw	kg P eq	5.64E-6	5.16E-8	3.79E-7	6.07E-6	1.37E-8	2.77E-7	6.76E-10	-2.11E-6	4.25E-6
EP-m	kg N eq	4.12E-4	1.44E-5	2.56E-5	4.52E-4	3.38E-6	1.63E-5	9.67E-7	-1.90E-4	2.83E-4
EP-T	mol N eq	4.19E-3	1.59E-4	2.67E-4	4.62E-3	3.73E-5	1.78E-4	2.03E-6	-1.91E-3	2.93E-3
POCP	kg NMVOC eq	1.59E-3	4.50E-5	8.46E-5	1.72E-3	1.07E-5	5.46E-5	7.40E-7	-7.25E-4	1.06E-3
ADP-mm	kg Sb eq	1.09E-5	1.61E-7	7.10E-7	1.17E-5	4.30E-8	2.02E-7	4.99E-10	-1.44E-6	1.05E-5
ADP-f	MJ	6.72E+0	9.76E-2	5.54E-1	7.37E+0	2.55E-2	1.61E-1	1.52E-3	-3.36E+0	4.20E+0
WDP	m3 depriv.	1.49E-1	2.94E-4	6.95E-3	1.56E-1	7.82E-5	3.51E-3	7.01E-6	-6.03E-2	9.97E-2
PM	disease inc.	1.94E-8	5.64E-10	1.04E-9	2.10E-8	1.50E-10	8.32E-10	1.03E-11	-8.35E-9	1.37E-8
IR	kBq U-235 eq	2.34E-3	4.26E-4	5.50E-4	3.31E-3	1.11E-4	4.89E-4	7.32E-6	-1.77E-4	3.74E-3
ETP-fw	CTUe	1.19E+0	7.87E-2	7.99E-1	2.06E+0	2.07E-2	2.70E-1	3.20E-3	-1.77E-1	2.18E+0
HTP-c	CTUh	9.88E-11	2.86E-12	3.22E-11	1.34E-10	7.36E-13	2.22E-11	4.02E-14	-1.96E-11	1.37E-10
HTP-nc	CTUh	1.61E-9	9.31E-11	7.06E-10	2.41E-9	2.47E-11	2.94E-10	1.29E-12	-4.18E-10	2.31E-9
SQP	Pt	3.18E-1	8.14E-2	1.05E-1	5.05E-1	2.18E-2	1.26E-1	3.85E-3	-1.70E-2	6.39E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.25E-2	1.38E-3	1.75E+0	1.82E+0	3.66E-4	8.16E-3	7.00E-5	-1.61E-2	1.81E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.25E-2	1.38E-3	1.75E+0	1.82E+0	3.66E-4	8.16E-3	7.00E-5	-1.61E-2	1.81E+0
PENRE	MJ	7.25E+0	1.04E-1	6.03E-1	7.95E+0	2.71E-2	1.72E-1	1.61E-3	-3.64E+0	4.52E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.25E+0	1.04E-1	6.03E-1	7.95E+0	2.71E-2	1.72E-1	1.61E-3	-3.64E+0	4.52E+0
PET	MJ	7.32E+0	1.05E-1	2.35E+0	9.78E+0	2.74E-2	1.80E-1	1.68E-3	-3.65E+0	6.33E+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	3.55E-3	1.09E-5	2.21E-4	3.78E-3	2.88E-6	1.17E-4	1.89E-6	-1.41E-3	2.49E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.74E-7	2.45E-7	4.61E-7	1.58E-6	6.52E-8	2.76E-7	1.81E-9	-4.78E-7	1.45E-6
NHWD	kg	2.02E-2	5.87E-3	2.17E-3	2.83E-2	1.58E-3	8.05E-3	6.61E-3	-2.15E-3	4.24E-2
RWD	kg	2.90E-6	6.64E-7	3.49E-7	3.91E-6	1.73E-7	6.12E-7	1.00E-8	-2.36E-7	4.47E-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