

Environmental Profile

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

Ecochain v3.5.71



Product: 3038728 - Irish Pb Branch Red Tee W 3/4X3/4X1/2i
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	5.83E-1	7.75E-3	5.09E-2	6.42E-1	1.98E-3	6.85E-2	8.92E-4	-2.94E-1	4.19E-1
GWP-f	kg CO2 eq	5.82E-1	7.75E-3	4.79E-2	6.38E-1	1.98E-3	6.86E-2	8.92E-4	-2.94E-1	4.16E-1
GWP-b	kg CO2 eq	1.13E-3	4.47E-6	2.94E-3	4.08E-3	1.20E-6	-7.40E-5	8.96E-7	-6.13E-4	3.39E-3
GWP-luluc	kg CO2 eq	3.02E-5	2.82E-6	2.66E-5	5.96E-5	6.99E-7	1.13E-5	1.74E-8	-1.57E-6	7.00E-5
ODP	kg CFC11 eq	6.75E-9	1.78E-9	4.83E-9	1.34E-8	4.55E-10	1.63E-9	2.44E-11	-2.97E-9	1.25E-8
AP	mol H+ eq	2.67E-3	5.17E-5	1.53E-4	2.88E-3	1.13E-5	6.48E-5	6.04E-7	-1.10E-3	1.85E-3
EP-fw	kg P eq	6.67E-6	6.25E-8	4.15E-7	7.14E-6	1.63E-8	3.31E-7	7.99E-10	-2.53E-6	4.96E-6
EP-m	kg N eq	4.92E-4	1.75E-5	2.84E-5	5.38E-4	4.03E-6	1.93E-5	1.14E-6	-2.27E-4	3.35E-4
EP-T	mol N eq	5.00E-3	1.93E-4	2.93E-4	5.49E-3	4.44E-5	2.11E-4	2.40E-6	-2.29E-3	3.46E-3
POCP	kg NMVOC eq	1.89E-3	5.45E-5	9.31E-5	2.04E-3	1.27E-5	6.50E-5	8.74E-7	-8.69E-4	1.25E-3
ADP-mm	kg Sb eq	1.18E-5	1.95E-7	7.46E-7	1.28E-5	5.11E-8	2.42E-7	5.90E-10	-1.69E-6	1.14E-5
ADP-f	MJ	7.98E+0	1.18E-1	6.47E-1	8.74E+0	3.03E-2	1.93E-1	1.79E-3	-4.01E+0	4.96E+0
WDP	m3 depriv.	1.77E-1	3.57E-4	7.72E-3	1.85E-1	9.31E-5	4.17E-3	8.28E-6	-7.22E-2	1.17E-1
PM	disease inc.	2.31E-8	6.83E-10	1.12E-9	2.49E-8	1.78E-10	9.95E-10	1.22E-11	-1.00E-8	1.61E-8
IR	kBq U-235 eq	2.52E-3	5.16E-4	6.21E-4	3.66E-3	1.33E-4	5.85E-4	8.65E-6	-1.97E-4	4.19E-3
ETP-fw	CTUe	1.36E+0	9.53E-2	8.49E-1	2.30E+0	2.46E-2	3.18E-1	3.78E-3	-2.09E-1	2.44E+0
HTP-c	CTUh	1.18E-10	3.46E-12	3.44E-11	1.56E-10	8.77E-13	2.66E-11	4.75E-14	-2.34E-11	1.60E-10
HTP-nc	CTUh	1.90E-9	1.13E-10	7.50E-10	2.76E-9	2.94E-11	3.51E-10	1.52E-12	-5.00E-10	2.64E-9
SQP	Pt	3.68E-1	9.86E-2	1.13E-1	5.79E-1	2.60E-2	1.51E-1	4.55E-3	-1.92E-2	7.41E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.36E-2	1.67E-3	1.83E+0	1.91E+0	4.35E-4	9.76E-3	8.28E-5	-1.92E-2	1.90E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.36E-2	1.67E-3	1.83E+0	1.91E+0	4.35E-4	9.76E-3	8.28E-5	-1.92E-2	1.90E+0
PENRE	MJ	8.60E+0	1.25E-1	7.06E-1	9.43E+0	3.22E-2	2.05E-1	1.90E-3	-4.34E+0	5.33E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.60E+0	1.25E-1	7.06E-1	9.43E+0	3.22E-2	2.05E-1	1.90E-3	-4.34E+0	5.33E+0
PET	MJ	8.68E+0	1.27E-1	2.53E+0	1.13E+1	3.26E-2	2.15E-1	1.98E-3	-4.36E+0	7.23E+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	4.21E-3	1.31E-5	2.42E-4	4.46E-3	3.43E-6	1.37E-4	2.23E-6	-1.69E-3	2.92E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.01E-6	2.96E-7	5.73E-7	1.88E-6	7.76E-8	3.29E-7	2.14E-9	-5.47E-7	1.74E-6
NHWD	kg	2.42E-2	7.11E-3	2.69E-3	3.40E-2	1.88E-3	9.58E-3	7.81E-3	-2.56E-3	5.07E-2
RWD	kg	3.10E-6	8.05E-7	4.33E-7	4.34E-6	2.06E-7	7.32E-7	1.18E-8	-2.62E-7	5.03E-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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