

Environmental Profile

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

Ecochain v3.5.71



Product: 3038748 - Irish Pb Tank Connector W 3/4X3/4"
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	4.84E-1	2.91E-3	2.94E-2	5.16E-1	1.46E-3	5.21E-2	6.64E-4	-2.56E-1	3.15E-1
GWP-f	kg CO2 eq	4.83E-1	2.91E-3	2.76E-2	5.13E-1	1.46E-3	5.21E-2	6.65E-4	-2.56E-1	3.12E-1
GWP-b	kg CO2 eq	1.35E-3	1.71E-6	1.80E-3	3.15E-3	8.88E-7	-5.44E-5	6.58E-7	-4.50E-4	2.65E-3
GWP-luluc	kg CO2 eq	2.81E-5	1.05E-6	1.41E-5	4.33E-5	5.18E-7	8.30E-6	1.37E-8	-1.25E-6	5.08E-5
ODP	kg CFC11 eq	6.18E-9	6.69E-10	2.87E-9	9.72E-9	3.37E-10	1.19E-9	1.82E-11	-2.20E-9	9.07E-9
AP	mol H+ eq	2.28E-3	1.84E-5	8.30E-5	2.38E-3	8.33E-6	4.77E-5	4.53E-7	-8.98E-4	1.54E-3
EP-fw	kg P eq	1.43E-5	2.37E-8	2.28E-7	1.45E-5	1.20E-8	2.43E-7	6.18E-10	-2.60E-6	1.22E-5
EP-m	kg N eq	6.15E-4	6.35E-6	1.58E-5	6.37E-4	2.98E-6	1.42E-5	8.15E-7	-2.04E-4	4.51E-4
EP-T	mol N eq	4.04E-3	7.00E-5	1.61E-4	4.27E-3	3.29E-5	1.56E-4	1.80E-6	-2.02E-3	2.44E-3
POCP	kg NMVOC eq	1.32E-3	1.99E-5	5.13E-5	1.39E-3	9.39E-6	4.78E-5	6.53E-7	-7.08E-4	7.44E-4
ADP-mm	kg Sb eq	8.22E-6	7.40E-8	3.93E-7	8.68E-6	3.78E-8	1.78E-7	4.50E-10	-1.71E-6	7.19E-6
ADP-f	MJ	6.64E+0	4.45E-2	3.76E-1	7.06E+0	2.25E-2	1.42E-1	1.34E-3	-3.09E+0	4.14E+0
WDP	m3 depriv.	3.90E-1	1.35E-4	4.29E-3	3.94E-1	6.89E-5	3.07E-3	9.06E-6	-7.08E-2	3.26E-1
PM	disease inc.	1.84E-8	2.59E-10	6.08E-10	1.93E-8	1.32E-10	7.33E-10	9.13E-12	-8.33E-9	1.18E-8
IR	kBq U-235 eq	2.38E-3	1.95E-4	3.51E-4	2.92E-3	9.81E-5	4.31E-4	6.40E-6	-1.53E-4	3.30E-3
ETP-fw	CTUe	1.46E+0	3.60E-2	4.53E-1	1.95E+0	1.82E-2	2.34E-1	2.73E-3	-1.85E-1	2.02E+0
HTP-c	CTUh	1.19E-10	1.30E-12	1.84E-11	1.39E-10	6.49E-13	2.12E-11	3.74E-14	-2.10E-11	1.40E-10
HTP-nc	CTUh	1.67E-9	4.27E-11	3.99E-10	2.11E-9	2.17E-11	2.62E-10	1.13E-12	-4.41E-10	1.96E-9
SQP	Pt	3.29E-1	3.75E-2	6.09E-2	4.27E-1	1.92E-2	1.11E-1	3.39E-3	-1.50E-2	5.46E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.00E-1	6.32E-4	9.57E-1	1.06E+0	3.22E-4	7.18E-3	5.97E-5	-1.52E-2	1.05E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.00E-1	6.32E-4	9.57E-1	1.06E+0	3.22E-4	7.18E-3	5.97E-5	-1.52E-2	1.05E+0
PENRE	MJ	7.15E+0	4.73E-2	4.11E-1	7.61E+0	2.38E-2	1.51E-1	1.42E-3	-3.35E+0	4.44E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.15E+0	4.73E-2	4.11E-1	7.61E+0	2.38E-2	1.51E-1	1.42E-3	-3.35E+0	4.44E+0
PET	MJ	7.25E+0	4.79E-2	1.37E+0	8.67E+0	2.42E-2	1.58E-1	1.48E-3	-3.36E+0	5.49E+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	9.15E-3	4.98E-6	1.33E-4	9.29E-3	2.54E-6	1.02E-4	1.65E-6	-1.65E-3	7.74E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.30E-7	1.12E-7	3.49E-7	1.29E-6	5.74E-8	2.44E-7	1.62E-9	-4.03E-7	1.19E-6
NHWD	kg	2.45E-2	2.71E-3	1.64E-3	2.88E-2	1.39E-3	7.10E-3	5.81E-3	-2.17E-3	4.10E-2
RWD	kg	2.88E-6	3.03E-7	2.64E-7	3.44E-6	1.53E-7	5.40E-7	8.78E-9	-2.03E-7	3.94E-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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