

Environmental Profile

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

Ecochain v3.5.71



Product: 3038024 - TB PB SHC Barr Pipe 500m Coil BN 16mm
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	1.63E+2	3.55E+0	2.03E+1	1.87E+2	1.10E+0	3.25E+1	4.77E-1	-9.12E+1	1.30E+2
GWP-f	kg CO2 eq	1.63E+2	3.54E+0	1.89E+1	1.85E+2	1.10E+0	3.17E+1	4.77E-1	-9.05E+1	1.28E+2
GWP-b	kg CO2 eq	2.23E-1	2.01E-3	1.44E+0	1.66E+0	6.65E-4	7.56E-1	4.77E-4	-7.07E-1	1.71E+0
GWP-luluc	kg CO2 eq	9.68E-3	1.30E-3	7.35E-3	1.83E-2	3.88E-4	6.25E-3	9.24E-6	-9.20E-4	2.41E-2
ODP	kg CFC11 eq	9.76E-7	8.11E-7	2.14E-6	3.93E-6	2.52E-7	9.08E-7	1.30E-8	-1.34E-6	3.76E-6
AP	mol H+ eq	9.22E-1	2.48E-2	4.66E-2	9.93E-1	6.24E-3	3.57E-2	3.21E-4	-4.50E-1	5.86E-1
EP-fw	kg P eq	4.80E-4	2.84E-5	1.35E-4	6.43E-4	9.01E-6	1.86E-4	4.25E-7	-7.99E-5	7.58E-4
EP-m	kg N eq	1.21E-1	8.27E-3	9.81E-3	1.39E-1	2.23E-3	1.06E-2	5.92E-4	-5.99E-2	9.23E-2
EP-T	mol N eq	1.36E+0	9.12E-2	9.54E-2	1.54E+0	2.46E-2	1.16E-1	1.28E-3	-6.55E-1	1.03E+0
POCP	kg NMVOC eq	7.14E-1	2.57E-2	3.08E-2	7.71E-1	7.03E-3	3.58E-2	4.66E-4	-3.59E-1	4.55E-1
ADP-mm	kg Sb eq	1.63E-3	8.84E-5	2.00E-4	1.91E-3	2.83E-5	1.37E-4	3.14E-7	-2.00E-5	2.06E-3
ADP-f	MJ	3.69E+3	5.39E+1	2.65E+2	4.00E+3	1.68E+1	1.09E+2	9.55E-1	-1.98E+3	2.15E+3
WDP	m3 depriv.	2.43E+1	1.62E-1	2.65E+0	2.71E+1	5.16E-2	2.27E+0	4.41E-3	-8.90E+0	2.05E+1
PM	disease inc.	7.94E-6	3.10E-7	3.42E-7	8.59E-6	9.89E-8	5.60E-7	6.52E-9	-3.81E-6	5.44E-6
IR	kBq U-235 eq	4.09E-1	2.36E-1	2.28E-1	8.73E-1	7.35E-2	3.30E-1	4.61E-3	-9.34E-2	1.19E+0
ETP-fw	CTUe	3.23E+2	4.34E+1	2.42E+2	6.09E+2	1.37E+1	1.65E+2	1.96E+0	-6.03E+1	7.29E+2
HTP-c	CTUh	2.15E-8	1.59E-9	1.00E-8	3.31E-8	4.86E-10	1.52E-8	2.52E-11	-6.19E-9	4.27E-8
HTP-nc	CTUh	4.85E-7	5.12E-8	2.12E-7	7.48E-7	1.63E-8	1.95E-7	7.99E-10	-1.48E-7	8.12E-7
SQP	Pt	1.32E+2	4.46E+1	3.39E+1	2.10E+2	1.44E+1	5.65E+1	2.43E+0	-9.96E+0	2.73E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.13E+1	7.56E-1	4.76E+2	5.08E+2	2.41E-1	1.24E+0	4.38E-2	-9.52E+0	5.00E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.13E+1	7.56E-1	4.76E+2	5.08E+2	2.41E-1	1.24E+0	4.38E-2	-9.52E+0	5.00E+2
PENRE	MJ	3.96E+3	5.73E+1	2.91E+2	4.31E+3	1.78E+1	1.16E+2	1.01E+0	-2.14E+3	2.30E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.96E+3	5.73E+1	2.91E+2	4.31E+3	1.78E+1	1.16E+2	1.01E+0	-2.14E+3	2.30E+3
PET	MJ	3.99E+3	5.80E+1	7.66E+2	4.81E+3	1.81E+1	1.17E+2	1.06E+0	-2.15E+3	2.80E+3
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	5.61E-1	5.96E-3	7.94E-2	6.46E-1	1.90E-3	6.63E-2	1.19E-3	-1.99E-1	5.16E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.42E-4	1.34E-4	2.78E-4	7.54E-4	4.30E-5	1.79E-4	1.14E-6	-2.58E-4	7.20E-4
NHWD	kg	4.44E+0	3.21E+0	1.30E+0	8.94E+0	1.04E+0	5.34E+0	4.16E+0	-9.26E-1	1.86E+1
RWD	kg	3.96E-4	3.67E-4	2.10E-4	9.73E-4	1.14E-4	4.14E-4	6.30E-6	-1.12E-4	1.40E-3
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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