

Environmental Profile

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

Ecochain v3.5.64



Product: 3076855 - Wavin RIB PP Pipe BR 250 SN8 L=6 S/PL
Unit: 1 Piece
Manufacturer: Wavin - SE - Eskilstuna

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 20-06-2022
End of validity: 20-06-2027
Verifier: Harry van Ewijk - 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 - SE - Eskilstuna (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 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF 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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.59E+1	3.58E+0	1.33E+0	4.08E+1	4.87E-1	1.58E+1	2.29E-1	-2.26E+1	3.46E+1
GWP-f	kg CO2 eq	3.74E+1	3.57E+0	9.62E-1	4.19E+1	4.86E-1	1.41E+1	2.29E-1	-2.25E+1	3.42E+1
GWP-b	kg CO2 eq	-1.48E+0	1.62E-3	2.53E-1	-1.23E+0	2.95E-4	1.63E+0	2.00E-4	-7.90E-2	3.22E-1
GWP-luluc	kg CO2 eq	1.04E-2	1.32E-3	1.12E-1	1.24E-1	1.72E-4	2.73E-3	3.89E-6	-4.36E-3	1.22E-1
ODP	kg CFC11 eq	7.04E-7	7.88E-7	1.09E-7	1.60E-6	1.12E-7	3.55E-7	5.75E-9	-8.31E-7	1.24E-6
AP	mol H+ eq	1.33E-1	2.19E-2	8.15E-3	1.63E-1	2.77E-3	1.49E-2	1.37E-4	-6.33E-2	1.18E-1
EP-fw	kg P eq	5.50E-4	3.58E-5	1.78E-5	6.03E-4	4.00E-6	7.87E-5	1.79E-7	-2.48E-4	4.38E-4
EP-m	kg N eq	2.24E-2	7.57E-3	2.41E-3	3.23E-2	9.91E-4	4.33E-3	8.93E-5	-1.12E-2	2.66E-2
EP-T	mol N eq	2.52E-1	8.35E-2	2.65E-2	3.62E-1	1.09E-2	4.77E-2	5.57E-4	-1.24E-1	2.98E-1
POCP	kg NMVOC eq	1.16E-1	2.37E-2	7.36E-3	1.47E-1	3.12E-3	1.51E-2	2.09E-4	-5.72E-2	1.09E-1
ADP-mm	kg Sb eq	5.14E-4	8.97E-5	2.89E-5	6.33E-4	1.26E-5	5.91E-5	1.38E-7	-1.49E-4	5.55E-4
ADP-f	MJ	1.33E+3	5.38E+1	9.56E+0	1.39E+3	7.46E+0	4.74E+1	4.20E-1	-7.11E+2	7.35E+2
WDP	m3 depriv.	2.61E+1	1.91E-1	6.16E+0	3.25E+1	2.29E-2	9.29E-1	2.09E-3	-1.23E+1	2.11E+1
PM	disease inc.	1.19E-6	3.18E-7	1.37E-7	1.64E-6	4.39E-8	2.46E-7	2.88E-9	-5.30E-7	1.41E-6
IR	kBq U-235 eq	6.85E-1	2.25E-1	2.84E-2	9.39E-1	3.26E-2	1.43E-1	1.95E-3	-3.30E-1	7.86E-1
ETP-fw	CTUe	2.01E+2	4.78E+1	2.66E+1	2.75E+2	6.06E+0	5.34E+1	3.51E-1	-8.78E+1	2.47E+2
HTP-c	CTUh	9.21E-9	1.56E-9	1.05E-9	1.18E-8	2.16E-10	6.43E-9	1.02E-11	-3.75E-9	1.47E-8
HTP-nc	CTUh	2.44E-7	5.22E-8	2.87E-8	3.25E-7	7.22E-9	7.95E-8	2.26E-10	-1.06E-7	3.05E-7
SQP	Pt	1.85E+2	4.62E+1	1.26E+0	2.32E+2	6.38E+0	3.78E+1	1.08E+0	-1.91E+1	2.58E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.35E+1	6.70E-1	6.03E+1	1.04E+2	1.07E-1	2.34E+0	1.63E-2	-8.83E+0	9.81E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.35E+1	6.70E-1	6.03E+1	1.04E+2	1.07E-1	2.34E+0	1.63E-2	-8.83E+0	9.81E+1
PENRE	MJ	1.42E+3	5.71E+1	1.02E+1	1.49E+3	7.92E+0	5.04E+1	4.45E-1	-7.66E+2	7.84E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.42E+3	5.71E+1	1.02E+1	1.49E+3	7.92E+0	5.04E+1	4.45E-1	-7.66E+2	7.84E+2
PET	MJ	1.47E+3	5.78E+1	7.04E+1	1.60E+3	8.03E+0	5.28E+1	4.61E-1	-7.75E+2	8.82E+2
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	3.92E-1	6.51E-3	1.46E-1	5.44E-1	8.45E-4	2.73E-2	5.17E-4	-1.84E-1	3.89E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.68E-4	1.35E-4	1.46E-5	3.18E-4	1.91E-5	7.69E-5	5.05E-7	-1.63E-4	2.52E-4
NHWD	kg	1.56E+0	3.38E+0	4.46E-2	4.98E+0	4.63E-1	2.32E+0	1.85E+0	-5.47E-1	9.06E+0
RWD	kg	6.01E-4	3.53E-4	4.04E-5	9.95E-4	5.08E-5	1.81E-4	2.74E-6	-2.97E-4	9.32E-4
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