

Environmental Profile

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

Ecochain v3.5.64



Product: 3076853 - Wavin RIB PP Pipe BR 200 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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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	2.37E+1	2.37E+0	8.60E-1	2.69E+1	3.23E-1	1.06E+1	1.52E-1	-1.50E+1	2.30E+1
GWP-f	kg CO2 eq	2.48E+1	2.37E+0	6.23E-1	2.78E+1	3.23E-1	9.38E+0	1.52E-1	-1.49E+1	2.27E+1
GWP-b	kg CO2 eq	-1.16E+0	1.07E-3	1.64E-1	-9.92E-1	1.96E-4	1.25E+0	1.33E-4	-5.24E-2	2.10E-1
GWP-luluc	kg CO2 eq	7.00E-3	8.77E-4	7.25E-2	8.03E-2	1.14E-4	1.81E-3	2.58E-6	-2.90E-3	7.94E-2
ODP	kg CFC11 eq	4.71E-7	5.23E-7	7.06E-8	1.06E-6	7.44E-8	2.35E-7	3.82E-9	-5.52E-7	8.27E-7
AP	mol H+ eq	8.88E-2	1.45E-2	5.28E-3	1.09E-1	1.84E-3	9.90E-3	9.10E-5	-4.21E-2	7.84E-2
EP-fw	kg P eq	3.66E-4	2.37E-5	1.15E-5	4.02E-4	2.66E-6	5.23E-5	1.19E-7	-1.65E-4	2.92E-4
EP-m	kg N eq	1.49E-2	5.03E-3	1.56E-3	2.15E-2	6.58E-4	2.88E-3	5.93E-5	-7.42E-3	1.76E-2
EP-T	mol N eq	1.68E-1	5.54E-2	1.72E-2	2.41E-1	7.25E-3	3.17E-2	3.70E-4	-8.22E-2	1.98E-1
POCP	kg NMVOC eq	7.74E-2	1.58E-2	4.77E-3	9.79E-2	2.07E-3	1.00E-2	1.39E-4	-3.80E-2	7.22E-2
ADP-mm	kg Sb eq	3.40E-4	5.95E-5	1.88E-5	4.18E-4	8.35E-6	3.92E-5	9.17E-8	-9.92E-5	3.67E-4
ADP-f	MJ	8.82E+2	3.57E+1	6.19E+0	9.24E+2	4.95E+0	3.14E+1	2.79E-1	-4.72E+2	4.88E+2
WDP	m3 depriv.	1.73E+1	1.27E-1	3.99E+0	2.15E+1	1.52E-2	6.17E-1	1.39E-3	-8.18E+0	1.39E+1
PM	disease inc.	7.92E-7	2.11E-7	8.91E-8	1.09E-6	2.91E-8	1.63E-7	1.91E-9	-3.52E-7	9.35E-7
IR	kBq U-235 eq	4.56E-1	1.50E-1	1.84E-2	6.24E-1	2.17E-2	9.47E-2	1.29E-3	-2.19E-1	5.23E-1
ETP-fw	CTUe	1.34E+2	3.17E+1	1.73E+1	1.83E+2	4.02E+0	3.54E+1	2.33E-1	-5.83E+1	1.64E+2
HTP-c	CTUh	6.18E-9	1.04E-9	6.82E-10	7.90E-9	1.43E-10	4.27E-9	6.79E-12	-2.49E-9	9.83E-9
HTP-nc	CTUh	1.62E-7	3.46E-8	1.86E-8	2.16E-7	4.80E-9	5.28E-8	1.50E-10	-7.06E-8	2.03E-7
SQP	Pt	1.37E+2	3.07E+1	8.14E-1	1.68E+2	4.24E+0	2.51E+1	7.15E-1	-1.27E+1	1.86E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.09E+1	4.45E-1	3.91E+1	7.04E+1	7.11E-2	1.55E+0	1.08E-2	-5.86E+0	6.62E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.09E+1	4.45E-1	3.91E+1	7.04E+1	7.11E-2	1.55E+0	1.08E-2	-5.86E+0	6.62E+1
PENRE	MJ	9.46E+2	3.79E+1	6.58E+0	9.91E+2	5.26E+0	3.35E+1	2.96E-1	-5.09E+2	5.21E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.46E+2	3.79E+1	6.58E+0	9.91E+2	5.26E+0	3.35E+1	2.96E-1	-5.09E+2	5.21E+2
PET	MJ	9.77E+2	3.84E+1	4.56E+1	1.06E+3	5.33E+0	3.50E+1	3.06E-1	-5.15E+2	5.87E+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	2.60E-1	4.32E-3	9.48E-2	3.59E-1	5.61E-4	1.81E-2	3.44E-4	-1.22E-1	2.56E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.13E-4	8.99E-5	9.43E-6	2.12E-4	1.27E-5	5.11E-5	3.36E-7	-1.08E-4	1.68E-4
NHWD	kg	1.04E+0	2.24E+0	2.89E-2	3.31E+0	3.07E-1	1.54E+0	1.23E+0	-3.63E-1	6.03E+0
RWD	kg	4.01E-4	2.35E-4	2.62E-5	6.62E-4	3.37E-5	1.20E-4	1.82E-6	-1.97E-4	6.20E-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



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