

Environmental Profile

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

Ecochain v3.5.64



Product: 3062811 - PP Sewer Pipe SW RB 160 SN8 L=6 Sew.Lock
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	3.31E+1	1.28E+0	1.16E+0	3.56E+1	4.32E-1	1.27E+1	2.04E-1	-2.01E+1	2.87E+1
GWP-f	kg CO2 eq	3.30E+1	1.28E+0	8.39E-1	3.51E+1	4.32E-1	1.27E+1	2.04E-1	-2.01E+1	2.83E+1
GWP-b	kg CO2 eq	1.47E-1	3.38E-4	2.21E-1	3.68E-1	2.62E-4	-1.73E-2	1.77E-4	-7.02E-2	2.81E-1
GWP-luluc	kg CO2 eq	8.53E-3	5.63E-4	9.76E-2	1.07E-1	1.53E-4	2.43E-3	3.46E-6	-3.88E-3	1.05E-1
ODP	kg CFC11 eq	5.81E-7	2.75E-7	9.51E-8	9.51E-7	9.95E-8	3.15E-7	5.11E-9	-7.46E-7	6.25E-7
AP	mol H+ eq	1.17E-1	1.73E-2	7.11E-3	1.41E-1	2.46E-3	1.33E-2	1.22E-4	-5.63E-2	1.01E-1
EP-fw	kg P eq	4.81E-4	1.06E-5	1.55E-5	5.07E-4	3.55E-6	7.00E-5	1.59E-7	-2.21E-4	3.60E-4
EP-m	kg N eq	1.94E-2	4.87E-3	2.11E-3	2.63E-2	8.80E-4	3.86E-3	7.93E-5	-9.95E-3	2.12E-2
EP-T	mol N eq	2.18E-1	5.39E-2	2.31E-2	2.96E-1	9.70E-3	4.25E-2	4.95E-4	-1.10E-1	2.38E-1
POCP	kg NMVOC eq	1.01E-1	1.45E-2	6.42E-3	1.22E-1	2.77E-3	1.34E-2	1.86E-4	-5.09E-2	8.79E-2
ADP-mm	kg Sb eq	4.42E-4	2.56E-5	2.53E-5	4.93E-4	1.12E-5	5.25E-5	1.23E-7	-1.33E-4	4.24E-4
ADP-f	MJ	1.18E+3	1.85E+1	8.34E+0	1.20E+3	6.63E+0	4.21E+1	3.73E-1	-6.33E+2	6.20E+2
WDP	m3 depriv.	2.32E+1	5.54E-2	5.37E+0	2.86E+1	2.03E-2	8.26E-1	1.86E-3	-1.10E+1	1.85E+1
PM	disease inc.	1.02E-6	9.30E-8	1.20E-7	1.23E-6	3.90E-8	2.18E-7	2.56E-9	-4.71E-7	1.02E-6
IR	kBq U-235 eq	5.97E-1	7.78E-2	2.48E-2	7.00E-1	2.90E-2	1.27E-1	1.73E-3	-2.94E-1	5.64E-1
ETP-fw	CTUe	1.71E+2	1.52E+1	2.33E+1	2.10E+2	5.38E+0	4.75E+1	3.12E-1	-7.81E+1	1.85E+2
HTP-c	CTUh	7.39E-9	5.92E-10	9.18E-10	8.90E-9	1.92E-10	5.73E-9	9.10E-12	-3.34E-9	1.15E-8
HTP-nc	CTUh	2.08E-7	1.57E-8	2.50E-8	2.49E-7	6.42E-9	7.08E-8	2.01E-10	-9.46E-8	2.32E-7
SQP	Pt	3.99E+1	1.26E+1	1.10E+0	5.36E+1	5.67E+0	3.36E+1	9.57E-1	-1.70E+1	7.69E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.68E+1	2.02E-1	5.26E+1	6.96E+1	9.51E-2	2.08E+0	1.44E-2	-7.85E+0	6.39E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.68E+1	2.02E-1	5.26E+1	6.96E+1	9.51E-2	2.08E+0	1.44E-2	-7.85E+0	6.39E+1
PENRE	MJ	1.26E+3	1.96E+1	8.86E+0	1.29E+3	7.04E+0	4.48E+1	3.96E-1	-6.82E+2	6.62E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.26E+3	1.96E+1	8.86E+0	1.29E+3	7.04E+0	4.48E+1	3.96E-1	-6.82E+2	6.62E+2
PET	MJ	1.28E+3	1.98E+1	6.15E+1	1.36E+3	7.14E+0	4.69E+1	4.10E-1	-6.90E+2	7.26E+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	3.47E-1	1.90E-3	1.28E-1	4.77E-1	7.50E-4	2.43E-2	4.60E-4	-1.64E-1	3.38E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.38E-4	3.90E-5	1.27E-5	1.89E-4	1.70E-5	6.84E-5	4.49E-7	-1.47E-4	1.28E-4
NHWD	kg	1.23E+0	8.82E-1	3.89E-2	2.16E+0	4.11E-1	2.07E+0	1.64E+0	-4.87E-1	5.79E+0
RWD	kg	5.16E-4	1.23E-4	3.53E-5	6.74E-4	4.51E-5	1.61E-4	2.43E-6	-2.64E-4	6.18E-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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