

Environmental Profile

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

Ecochain v3.5.64



Product: 3015304 - PE100 Pressure Pipe BK 160x14.6 L=12
Unit: 1 piece
Manufacturer: Wavin - DE - Westeregeln - verified
Address: Borrweg 10
39448 Börde-Hakel
Germany
Contact: <https://www.wavin.com/en-en>

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 11-08-2022
End of validity: 11-08-2027
Verifier: Martijn van Hövell - SGS Search



PE pressure pipe that offers the right solution for every part of the main network in your sewerage system.

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 - DE - Westeregeln - 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					D Reuse- Recovery- Recycling- potential											
A5 Assembly / Construction installation process																

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.63E+2	3.69E+0	3.25E+0	1.70E+2	2.13E+0	6.98E+1	1.18E+0	-1.07E+2	1.36E+2
GWP-f	kg CO2 eq	1.62E+2	3.69E+0	2.67E+0	1.69E+2	2.13E+0	6.99E+1	1.18E+0	-1.07E+2	1.35E+2
GWP-b	kg CO2 eq	7.77E-1	1.70E-3	2.70E-1	1.05E+0	1.29E-3	-8.03E-2	8.86E-4	-4.04E-1	5.67E-1
GWP-luluc	kg CO2 eq	4.90E-2	1.35E-3	3.03E-1	3.54E-1	7.54E-4	1.20E-2	1.69E-5	-2.42E-2	3.42E-1
ODP	kg CFC11 eq	8.90E-6	8.14E-7	3.55E-7	1.01E-5	4.91E-7	1.56E-6	2.52E-8	-5.14E-6	7.00E-6
AP	mol H+ eq	6.07E-1	2.14E-2	1.58E-2	6.44E-1	1.21E-2	6.55E-2	6.00E-4	-2.95E-1	4.27E-1
EP-fw	kg P eq	2.69E-3	3.72E-5	6.04E-5	2.79E-3	1.75E-5	3.45E-4	7.80E-7	-1.33E-3	1.83E-3
EP-m	kg N eq	1.01E-1	7.54E-3	3.28E-3	1.12E-1	4.34E-3	1.91E-2	4.25E-4	-5.40E-2	8.22E-2
EP-T	mol N eq	1.13E+0	8.31E-2	3.29E-2	1.25E+0	4.78E-2	2.10E-1	2.44E-3	-6.00E-1	9.07E-1
POCP	kg NMVOC eq	5.41E-1	2.37E-2	9.48E-3	5.74E-1	1.37E-2	6.63E-2	9.56E-4	-2.80E-1	3.76E-1
ADP-mm	kg Sb eq	1.46E-3	9.34E-5	7.73E-5	1.63E-3	5.51E-5	2.59E-4	6.02E-7	-6.88E-4	1.26E-3
ADP-f	MJ	5.77E+3	5.56E+1	3.15E+1	5.86E+3	3.27E+1	2.08E+2	1.84E+0	-3.20E+3	2.90E+3
WDP	m3 depriv.	1.24E+2	1.99E-1	1.76E+1	1.42E+2	1.00E-1	4.08E+0	8.42E-3	-6.20E+1	8.42E+1
PM	disease inc.	5.77E-6	3.31E-7	1.43E-7	6.24E-6	1.92E-7	1.08E-6	1.26E-8	-2.33E-6	5.19E-6
IR	kBq U-235 eq	4.99E+0	2.33E-1	8.60E-2	5.30E+0	1.43E-1	6.25E-1	8.56E-3	-1.93E+0	4.15E+0
ETP-fw	CTUe	1.04E+3	4.96E+1	7.64E+1	1.17E+3	2.65E+1	2.36E+2	1.62E+0	-4.64E+2	9.69E+2
HTP-c	CTUh	4.25E-8	1.61E-9	2.84E-9	4.70E-8	9.44E-10	2.80E-8	4.46E-11	-2.21E-8	5.39E-8
HTP-nc	CTUh	1.01E-6	5.43E-8	7.27E-8	1.14E-6	3.16E-8	3.54E-7	1.03E-9	-4.93E-7	1.03E-6
SQP	Pt	2.21E+2	4.83E+1	3.08E+0	2.73E+2	2.80E+1	1.66E+2	4.72E+0	-1.01E+2	3.70E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.34E+1	6.96E-1	1.64E+2	2.58E+2	4.69E-1	1.02E+1	7.27E-2	-4.62E+1	2.22E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.34E+1	6.96E-1	1.64E+2	2.58E+2	4.69E-1	1.02E+1	7.27E-2	-4.62E+1	2.22E+2
PENRE	MJ	6.19E+3	5.91E+1	3.37E+1	6.28E+3	3.47E+1	2.21E+2	1.95E+0	-3.45E+3	3.09E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.19E+3	5.91E+1	3.37E+1	6.28E+3	3.47E+1	2.21E+2	1.95E+0	-3.45E+3	3.09E+3
PET	MJ	6.28E+3	5.98E+1	1.97E+2	6.54E+3	3.52E+1	2.31E+2	2.02E+0	-3.50E+3	3.31E+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	1.88E+0	6.77E-3	4.18E-1	2.31E+0	3.70E-3	1.20E-1	2.27E-3	-9.48E-1	1.49E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.75E-4	1.41E-4	5.19E-5	9.68E-4	8.36E-5	3.38E-4	2.21E-6	-9.44E-4	4.47E-4
NHWD	kg	5.26E+0	3.53E+0	6.50E-2	8.85E+0	2.03E+0	1.02E+1	8.10E+0	-2.60E+0	2.66E+1
RWD	kg	5.43E-3	3.65E-4	1.24E-4	5.92E-3	2.22E-4	7.92E-4	1.20E-5	-1.79E-3	5.16E-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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