

Environmental Profile

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

Ecochain v3.5.64



Product: 3064079 - PE Collector Pipe BR 40 L=350 STR
 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	1.66E+2	1.76E+1	7.23E+0	1.91E+2	2.70E+0	1.40E+2	1.49E+0	-1.36E+2	1.98E+2
GWP-f	kg CO2 eq	2.16E+2	1.76E+1	5.24E+0	2.39E+2	2.70E+0	8.87E+1	1.49E+0	-1.36E+2	1.96E+2
GWP-b	kg CO2 eq	-5.00E+1	-1.08E-3	1.38E+0	-4.86E+1	1.64E-3	5.09E+1	1.12E-3	-5.11E-1	1.79E+0
GWP-luluc	kg CO2 eq	9.66E-2	1.03E-2	6.10E-1	7.17E-1	9.55E-4	1.53E-2	2.17E-5	-3.80E-2	6.95E-1
ODP	kg CFC11 eq	6.65E-6	3.63E-6	5.94E-7	1.09E-5	6.22E-7	2.04E-6	3.19E-8	-6.67E-6	6.89E-6
AP	mol H+ eq	8.25E-1	4.23E-1	4.44E-2	1.29E+0	1.54E-2	8.80E-2	7.63E-4	-3.97E-1	9.99E-1
EP-fw	kg P eq	4.02E-3	1.05E-4	9.68E-5	4.23E-3	2.22E-5	4.43E-4	9.97E-7	-1.76E-3	2.93E-3
EP-m	kg N eq	1.47E-1	1.07E-1	1.32E-2	2.67E-1	5.50E-3	2.63E-2	5.36E-4	-7.51E-2	2.24E-1
EP-T	mol N eq	1.68E+0	1.19E+0	1.44E-1	3.02E+0	6.06E-2	2.90E-1	3.09E-3	-8.68E-1	2.50E+0
POCP	kg NMVOC eq	7.51E-1	3.12E-1	4.01E-2	1.10E+0	1.73E-2	9.06E-2	1.21E-3	-3.74E-1	8.39E-1
ADP-mm	kg Sb eq	2.99E-3	2.30E-4	1.58E-4	3.38E-3	6.98E-5	3.35E-4	7.68E-7	-8.87E-4	2.90E-3
ADP-f	MJ	7.37E+3	2.37E+2	5.21E+1	7.66E+3	4.14E+1	2.68E+2	2.33E+0	-4.06E+3	3.91E+3
WDP	m3 depriv.	1.70E+2	5.23E-1	3.36E+1	2.04E+2	1.27E-1	5.22E+0	1.17E-2	-7.88E+1	1.30E+2
PM	disease inc.	9.01E-6	8.67E-7	7.49E-7	1.06E-5	2.44E-7	1.42E-6	1.60E-8	-3.36E-6	8.94E-6
IR	kBq U-235 eq	5.47E+0	1.01E+0	1.55E-1	6.64E+0	1.81E-1	8.13E-1	1.08E-2	-2.49E+0	5.15E+0
ETP-fw	CTUe	1.51E+3	1.73E+2	1.45E+2	1.82E+3	3.36E+1	3.05E+2	2.05E+0	-7.96E+2	1.37E+3
HTP-c	CTUh	7.99E-8	9.23E-9	5.74E-9	9.48E-8	1.20E-9	3.96E-8	5.74E-11	-3.11E-8	1.05E-7
HTP-nc	CTUh	1.57E-6	1.60E-7	1.56E-7	1.88E-6	4.01E-8	4.64E-7	1.31E-9	-7.16E-7	1.67E-6
SQP	Pt	4.93E+3	9.33E+1	6.85E+0	5.03E+3	3.55E+1	2.14E+2	5.98E+0	-1.12E+3	4.17E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.21E+2	2.08E+0	3.29E+2	1.15E+3	5.94E-1	1.31E+1	9.17E-2	-2.58E+2	9.08E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.21E+2	2.08E+0	3.29E+2	1.15E+3	5.94E-1	1.31E+1	9.17E-2	-2.58E+2	9.08E+2
PENRE	MJ	7.90E+3	2.52E+2	5.53E+1	8.21E+3	4.40E+1	2.85E+2	2.47E+0	-4.38E+3	4.16E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.90E+3	2.52E+2	5.53E+1	8.21E+3	4.40E+1	2.85E+2	2.47E+0	-4.38E+3	4.16E+3
PET	MJ	8.73E+3	2.54E+2	3.84E+2	9.36E+3	4.46E+1	2.99E+2	2.57E+0	-4.64E+3	5.07E+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	2.65E+0	1.82E-2	7.98E-1	3.46E+0	4.69E-3	1.58E-1	2.88E-3	-1.21E+0	2.42E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.43E-3	3.52E-4	7.93E-5	1.86E-3	1.06E-4	4.41E-4	2.81E-6	-1.23E-3	1.18E-3
NHWD	kg	1.05E+1	5.66E+0	2.43E-1	1.64E+1	2.57E+0	1.40E+1	1.03E+1	-3.72E+0	3.95E+1
RWD	kg	5.01E-3	1.62E-3	2.20E-4	6.85E-3	2.82E-4	1.03E-3	1.52E-5	-2.33E-3	5.84E-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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