

Environmental Profile

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

Ecochain v3.5.64



Product: 3064080 - PE Collector Pipe BR 40 L=400 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					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	1.96E+2	2.00E+1	8.27E+0	2.24E+2	3.09E+0	1.52E+2	1.71E+0	-1.56E+2	2.25E+2
GWP-f	kg CO2 eq	2.46E+2	2.00E+1	5.99E+0	2.72E+2	3.08E+0	1.01E+2	1.71E+0	-1.55E+2	2.23E+2
GWP-b	kg CO2 eq	-4.99E+1	-1.25E-3	1.58E+0	-4.83E+1	1.87E-3	5.09E+1	1.28E-3	-5.84E-1	2.05E+0
GWP-luluc	kg CO2 eq	1.06E-1	1.18E-2	6.97E-1	8.14E-1	1.09E-3	1.75E-2	2.48E-5	-4.23E-2	7.91E-1
ODP	kg CFC11 eq	7.43E-6	4.15E-6	6.79E-7	1.23E-5	7.11E-7	2.32E-6	3.65E-8	-7.59E-6	7.74E-6
AP	mol H+ eq	9.33E-1	4.83E-1	5.08E-2	1.47E+0	1.76E-2	9.98E-2	8.72E-4	-4.50E-1	1.14E+0
EP-fw	kg P eq	4.53E-3	1.20E-4	1.11E-4	4.77E-3	2.54E-5	5.05E-4	1.14E-6	-2.00E-3	3.30E-3
EP-m	kg N eq	1.65E-1	1.23E-1	1.50E-2	3.03E-1	6.29E-3	2.98E-2	6.13E-4	-8.48E-2	2.55E-1
EP-T	mol N eq	1.89E+0	1.36E+0	1.65E-1	3.42E+0	6.93E-2	3.28E-1	3.54E-3	-9.76E-1	2.84E+0
POCP	kg NMVOC eq	8.50E-1	3.57E-1	4.58E-2	1.25E+0	1.98E-2	1.03E-1	1.39E-3	-4.24E-1	9.52E-1
ADP-mm	kg Sb eq	3.40E-3	2.62E-4	1.80E-4	3.84E-3	7.98E-5	3.81E-4	8.78E-7	-1.01E-3	3.29E-3
ADP-f	MJ	8.40E+3	2.71E+2	5.95E+1	8.73E+3	4.74E+1	3.05E+2	2.67E+0	-4.64E+3	4.45E+3
WDP	m3 depriv.	1.93E+2	5.96E-1	3.84E+1	2.32E+2	1.45E-1	5.96E+0	1.33E-2	-9.00E+1	1.49E+2
PM	disease inc.	9.91E-6	9.88E-7	8.56E-7	1.18E-5	2.78E-7	1.61E-6	1.83E-8	-3.78E-6	9.88E-6
IR	kBq U-235 eq	6.17E+0	1.15E+0	1.77E-1	7.50E+0	2.07E-1	9.26E-1	1.24E-2	-2.84E+0	5.81E+0
ETP-fw	CTUe	1.68E+3	1.98E+2	1.66E+2	2.05E+3	3.85E+1	3.47E+2	2.35E+0	-8.80E+2	1.55E+3
HTP-c	CTUh	8.84E-8	1.05E-8	6.56E-9	1.05E-7	1.37E-9	4.47E-8	6.55E-11	-3.51E-8	1.17E-7
HTP-nc	CTUh	1.76E-6	1.83E-7	1.79E-7	2.12E-6	4.58E-8	5.28E-7	1.50E-9	-8.05E-7	1.89E-6
SQP	Pt	4.98E+3	1.06E+2	7.83E+0	5.09E+3	4.05E+1	2.44E+2	6.83E+0	-1.14E+3	4.24E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.39E+2	2.37E+0	3.76E+2	1.22E+3	6.79E-1	1.50E+1	1.05E-1	-2.66E+2	9.66E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.39E+2	2.37E+0	3.76E+2	1.22E+3	6.79E-1	1.50E+1	1.05E-1	-2.66E+2	9.66E+2
PENRE	MJ	9.01E+3	2.87E+2	6.32E+1	9.36E+3	5.03E+1	3.25E+2	2.83E+0	-5.00E+3	4.74E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.01E+3	2.87E+2	6.32E+1	9.36E+3	5.03E+1	3.25E+2	2.83E+0	-5.00E+3	4.74E+3
PET	MJ	9.85E+3	2.90E+2	4.39E+2	1.06E+4	5.10E+1	3.40E+2	2.93E+0	-5.27E+3	5.70E+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	3.01E+0	2.07E-2	9.12E-1	3.94E+0	5.36E-3	1.80E-1	3.29E-3	-1.38E+0	2.75E+0

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.58E-3	4.01E-4	9.07E-5	2.07E-3	1.21E-4	5.02E-4	3.21E-6	-1.40E-3	1.30E-3
NHWD	kg	1.17E+1	6.44E+0	2.78E-1	1.84E+1	2.94E+0	1.58E+1	1.17E+1	-4.19E+0	4.47E+1
RWD	kg	5.64E-3	1.85E-3	2.52E-4	7.73E-3	3.22E-4	1.18E-3	1.74E-5	-2.66E-3	6.59E-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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