

Environmental Profile

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

Ecochain v3.5.80



Product: 3043792 - PP Drainage EndCup BR 92
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
Verifier: Martijn van Hövell - 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 - PL -Buk - Extra products (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 EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 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]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	8.55E-2	5.35E-4	1.45E-4	8.62E-2	1.45E-3	1.74E-1	6.80E-4	-8.40E-2	1.78E-1
GWP-f	kg CO2 eq	1.84E-1	5.35E-4	1.46E-4	1.85E-1	1.44E-3	6.34E-2	6.80E-4	-1.06E-1	1.44E-1
GWP-b	kg CO2 eq	-9.87E-2	3.25E-7	-1.54E-6	-9.87E-2	8.77E-7	1.10E-1	5.90E-7	2.25E-2	3.41E-2
GWP-luluc	kg CO2 eq	2.81E-4	1.89E-7	1.49E-7	2.81E-4	5.11E-7	9.27E-6	1.19E-8	-2.32E-4	5.94E-5
ODP	kg CFC11 eq	9.05E-9	1.23E-10	8.26E-12	9.19E-9	3.33E-10	1.60E-9	1.71E-11	-8.05E-9	3.09E-9
AP	mol H+ eq	7.83E-4	3.05E-6	1.47E-6	7.88E-4	8.22E-6	6.50E-5	4.09E-7	-4.09E-4	4.52E-4
EP-fw	kg P eq	5.30E-6	4.40E-9	8.24E-9	5.31E-6	1.19E-8	2.78E-7	5.42E-10	-3.62E-6	1.99E-6
EP-m	kg N eq	1.65E-4	1.09E-6	1.55E-7	1.66E-4	2.94E-6	2.07E-5	2.63E-7	-8.84E-5	1.02E-4
EP-T	mol N eq	1.77E-3	1.20E-5	1.85E-6	1.79E-3	3.24E-5	2.28E-4	1.66E-6	-1.01E-3	1.04E-3
POCP	kg NMVOC eq	6.69E-4	3.43E-6	6.28E-7	6.73E-4	9.27E-6	6.99E-5	6.22E-7	-3.67E-4	3.85E-4
ADP-mm	kg Sb eq	2.83E-6	1.38E-8	1.97E-8	2.86E-6	3.74E-8	2.51E-7	4.15E-10	-8.70E-7	2.28E-6
ADP-f	MJ	5.22E+0	8.21E-3	1.36E-3	5.23E+0	2.22E-2	1.78E-1	1.25E-3	-2.76E+0	2.68E+0
WDP	m3 depriv.	1.10E-1	2.52E-5	5.22E-5	1.10E-1	6.80E-5	3.06E-3	7.49E-6	-7.85E-2	3.50E-2
PM	disease inc.	8.97E-9	4.83E-11	9.08E-12	9.03E-9	1.30E-10	1.02E-9	8.59E-12	-5.80E-9	4.39E-9
IR	kBq U-235 eq	4.78E-3	3.59E-5	1.02E-6	4.82E-3	9.69E-5	5.88E-4	5.77E-6	-3.25E-3	2.26E-3
ETP-fw	CTUe	4.75E+0	6.67E-3	1.21E-2	4.77E+0	1.80E-2	2.24E-1	1.04E-3	-2.61E+0	2.41E+0
HTP-c	CTUh	1.25E-10	2.37E-13	6.17E-13	1.26E-10	6.40E-13	2.75E-11	3.14E-14	-6.25E-11	9.18E-11
HTP-nc	CTUh	2.15E-9	7.95E-12	1.57E-11	2.18E-9	2.15E-11	3.16E-10	6.78E-13	-8.48E-10	1.67E-9
SQP	Pt	9.53E+0	7.02E-3	2.24E-3	9.54E+0	1.90E-2	1.37E-1	3.20E-3	-1.14E+1	-1.69E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.72E+0	1.18E-4	2.40E-2	1.75E+0	3.18E-4	8.16E-3	4.77E-5	-1.87E+0	-1.08E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.72E+0	1.18E-4	2.40E-2	1.75E+0	3.18E-4	8.16E-3	4.77E-5	-1.87E+0	-1.08E-1
PENRE	MJ	5.61E+0	8.72E-3	1.44E-3	5.62E+0	2.35E-2	1.89E-1	1.33E-3	-2.97E+0	2.86E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.61E+0	8.72E-3	1.44E-3	5.62E+0	2.35E-2	1.89E-1	1.33E-3	-2.97E+0	2.86E+0
PET	MJ	7.33E+0	8.83E-3	2.55E-2	7.37E+0	2.38E-2	1.98E-1	1.37E-3	-4.84E+0	2.75E+0
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	2.13E-3	9.29E-7	1.46E-6	2.13E-3	2.51E-6	9.89E-5	1.53E-6	-1.62E-3	6.12E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.09E-6	2.10E-8	2.73E-13	2.11E-6	5.67E-8	3.28E-7	1.52E-9	-1.77E-6	7.27E-7
NHWD	kg	1.70E-2	5.09E-4	1.05E-6	1.75E-2	1.37E-3	9.44E-3	5.49E-3	-7.89E-3	2.59E-2
RWD	kg	4.68E-6	5.58E-8	1.10E-13	4.74E-6	1.51E-7	7.72E-7	8.14E-9	-3.22E-6	2.44E-6
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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