

Environmental Profile

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

Ecochain v3.5.80



Product: 4038142 - Wavin R600 IC E-Base Straight BK 150
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

Wavin offers Inspection Chambers in 315, 450 and 600mm diameters, approved to BS EN 13598-2 for deep applications. They are suitable for use in both adoptable and non-adoptable applications to a maximum depth of 3 metres, depending on the chamber and the application. There is also a 200mm diameter Inspection Chamber approved to BS EN 13598-1.

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	3.14E+1	1.46E+0	2.18E-1	3.31E+1	6.68E-1	5.50E+1	3.24E-1	-3.55E+1	5.36E+1
GWP-f	kg CO2 eq	6.21E+1	1.46E+0	2.20E-1	6.38E+1	6.68E-1	2.40E+1	3.24E-1	-3.54E+1	5.34E+1
GWP-b	kg CO2 eq	-3.07E+1	8.84E-4	-2.32E-3	-3.07E+1	4.05E-4	3.10E+1	2.84E-4	-1.04E-1	1.81E-1
GWP-luluc	kg CO2 eq	3.44E-2	5.15E-4	2.25E-4	3.52E-2	2.36E-4	3.73E-3	5.64E-6	-1.94E-2	1.97E-2
ODP	kg CFC11 eq	3.43E-6	3.35E-7	1.24E-8	3.78E-6	1.54E-7	5.18E-7	8.18E-9	-2.07E-6	2.39E-6
AP	mol H+ eq	2.46E-1	8.29E-3	2.22E-3	2.57E-1	3.80E-3	2.21E-2	1.96E-4	-1.12E-1	1.71E-1
EP-fw	kg P eq	1.16E-3	1.20E-5	1.24E-5	1.19E-3	5.49E-6	1.08E-4	2.57E-7	-5.25E-4	7.74E-4
EP-m	kg N eq	4.38E-2	2.97E-3	2.34E-4	4.70E-2	1.36E-3	6.65E-3	1.44E-4	-2.24E-2	3.28E-2
EP-T	mol N eq	4.97E-1	3.27E-2	2.79E-3	5.32E-1	1.50E-2	7.34E-2	7.93E-4	-2.55E-1	3.66E-1
POCP	kg NMVOC eq	2.17E-1	9.34E-3	9.45E-4	2.27E-1	4.29E-3	2.27E-2	2.97E-4	-1.07E-1	1.48E-1
ADP-mm	kg Sb eq	2.76E-3	3.76E-5	2.96E-5	2.83E-3	1.73E-5	8.31E-5	1.98E-7	-3.32E-4	2.60E-3
ADP-f	MJ	2.02E+3	2.23E+1	2.04E+0	2.05E+3	1.02E+1	6.62E+1	5.97E-1	-1.03E+3	1.09E+3
WDP	m3 depriv.	3.93E+1	6.86E-2	7.85E-2	3.94E+1	3.14E-2	1.31E+0	3.26E-3	-1.80E+1	2.28E+1
PM	disease inc.	2.81E-6	1.31E-7	1.37E-8	2.95E-6	6.03E-8	3.49E-7	4.10E-9	-1.22E-6	2.14E-6
IR	kBq U-235 eq	1.73E+0	9.76E-2	1.53E-3	1.83E+0	4.48E-2	2.03E-1	2.77E-3	-6.56E-1	1.43E+0
ETP-fw	CTUe	5.59E+2	1.81E+1	1.82E+1	5.95E+2	8.32E+0	8.15E+1	5.53E-1	-2.49E+2	4.37E+2
HTP-c	CTUh	3.04E-8	6.45E-10	9.28E-10	3.19E-8	2.96E-10	9.51E-9	1.49E-11	-1.52E-8	2.66E-8
HTP-nc	CTUh	5.52E-7	2.16E-8	2.36E-8	5.97E-7	9.92E-9	1.14E-7	3.36E-10	-2.40E-7	4.82E-7
SQP	Pt	2.73E+3	1.91E+1	3.37E+0	2.75E+3	8.77E+0	5.26E+1	1.53E+0	-1.98E+3	8.42E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.01E+2	3.20E-1	3.62E+1	5.37E+2	1.47E-1	3.22E+0	2.33E-2	-3.09E+2	2.32E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.01E+2	3.20E-1	3.62E+1	5.37E+2	1.47E-1	3.22E+0	2.33E-2	-3.09E+2	2.32E+2
PENRE	MJ	2.17E+3	2.37E+1	2.17E+0	2.19E+3	1.09E+1	7.06E+1	6.34E-1	-1.11E+3	1.16E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.17E+3	2.37E+1	2.17E+0	2.19E+3	1.09E+1	7.06E+1	6.34E-1	-1.11E+3	1.16E+3
PET	MJ	2.67E+3	2.40E+1	3.84E+1	2.73E+3	1.10E+1	7.38E+1	6.57E-1	-1.42E+3	1.39E+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	6.53E-1	2.53E-3	2.20E-3	6.58E-1	1.16E-3	4.42E-2	7.36E-4	-2.83E-1	4.21E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.54E-4	5.71E-5	4.11E-10	6.11E-4	2.62E-5	1.13E-4	7.22E-7	-4.14E-4	3.37E-4
NHWD	kg	3.97E+0	1.38E+0	1.59E-3	5.36E+0	6.35E-1	3.43E+0	2.63E+0	-1.85E+0	1.02E+1
RWD	kg	1.90E-3	1.52E-4	1.65E-10	2.05E-3	6.97E-5	2.59E-4	3.90E-6	-6.50E-4	1.73E-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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