

Environmental Profile

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

Ecochain v3.5.80



Product: 4040658 - Wavin R600 IC E-Base Bent 90 BK 300
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	4.36E+1	1.75E+0	2.18E-1	4.56E+1	8.14E-1	6.01E+1	3.94E-1	-4.25E+1	6.43E+1
GWP-f	kg CO2 eq	7.43E+1	1.75E+0	2.20E-1	7.63E+1	8.13E-1	2.90E+1	3.94E-1	-4.24E+1	6.41E+1
GWP-b	kg CO2 eq	-3.07E+1	1.06E-3	-2.32E-3	-3.07E+1	4.94E-4	3.10E+1	3.45E-4	-1.28E-1	2.08E-1
GWP-luluc	kg CO2 eq	3.81E-2	6.20E-4	2.25E-4	3.89E-2	2.88E-4	4.54E-3	6.85E-6	-2.08E-2	2.29E-2
ODP	kg CFC11 eq	3.92E-6	4.04E-7	1.24E-8	4.34E-6	1.87E-7	6.24E-7	9.94E-9	-2.42E-6	2.74E-6
AP	mol H+ eq	2.91E-1	9.98E-3	2.22E-3	3.04E-1	4.63E-3	2.66E-2	2.38E-4	-1.31E-1	2.04E-1
EP-fw	kg P eq	1.35E-3	1.44E-5	1.24E-5	1.38E-3	6.69E-6	1.32E-4	3.13E-7	-6.03E-4	9.17E-4
EP-m	kg N eq	5.13E-2	3.57E-3	2.34E-4	5.51E-2	1.66E-3	7.98E-3	1.74E-4	-2.58E-2	3.90E-2
EP-T	mol N eq	5.80E-1	3.93E-2	2.79E-3	6.22E-1	1.83E-2	8.80E-2	9.64E-4	-2.93E-1	4.36E-1
POCP	kg NMVOC eq	2.55E-1	1.12E-2	9.45E-4	2.67E-1	5.22E-3	2.73E-2	3.61E-4	-1.24E-1	1.76E-1
ADP-mm	kg Sb eq	3.15E-3	4.53E-5	2.96E-5	3.23E-3	2.10E-5	1.01E-4	2.40E-7	-3.86E-4	2.96E-3
ADP-f	MJ	2.44E+3	2.69E+1	2.04E+0	2.47E+3	1.25E+1	8.03E+1	7.26E-1	-1.25E+3	1.32E+3
WDP	m3 depriv.	4.76E+1	8.25E-2	7.85E-2	4.77E+1	3.83E-2	1.59E+0	3.96E-3	-2.17E+1	2.76E+1
PM	disease inc.	3.22E-6	1.58E-7	1.37E-8	3.39E-6	7.34E-8	4.22E-7	4.99E-9	-1.38E-6	2.51E-6
IR	kBq U-235 eq	2.02E+0	1.18E-1	1.53E-3	2.14E+0	5.46E-2	2.46E-1	3.37E-3	-7.61E-1	1.68E+0
ETP-fw	CTUe	6.41E+2	2.18E+1	1.82E+1	6.81E+2	1.01E+1	9.83E+1	6.68E-1	-2.77E+2	5.13E+2
HTP-c	CTUh	3.35E-8	7.77E-10	9.28E-10	3.52E-8	3.61E-10	1.15E-8	1.81E-11	-1.64E-8	3.07E-8
HTP-nc	CTUh	6.38E-7	2.60E-8	2.36E-8	6.87E-7	1.21E-8	1.38E-7	4.07E-10	-2.73E-7	5.65E-7
SQP	Pt	2.75E+3	2.30E+1	3.37E+0	2.78E+3	1.07E+1	6.38E+1	1.86E+0	-1.98E+3	8.73E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.16E+2	3.86E-1	3.62E+1	5.52E+2	1.79E-1	3.91E+0	2.83E-2	-3.11E+2	2.45E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.16E+2	3.86E-1	3.62E+1	5.52E+2	1.79E-1	3.91E+0	2.83E-2	-3.11E+2	2.45E+2
PENRE	MJ	2.62E+3	2.85E+1	2.17E+0	2.65E+3	1.33E+1	8.56E+1	7.70E-1	-1.35E+3	1.40E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.62E+3	2.85E+1	2.17E+0	2.65E+3	1.33E+1	8.56E+1	7.70E-1	-1.35E+3	1.40E+3
PET	MJ	3.13E+3	2.89E+1	3.84E+1	3.20E+3	1.34E+1	8.95E+1	7.99E-1	-1.66E+3	1.65E+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	7.84E-1	3.04E-3	2.20E-3	7.90E-1	1.41E-3	5.31E-2	8.94E-4	-3.39E-1	5.06E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.17E-4	6.88E-5	4.11E-10	6.85E-4	3.19E-5	1.36E-4	8.77E-7	-4.72E-4	3.82E-4
NHWD	kg	4.47E+0	1.67E+0	1.59E-3	6.13E+0	7.74E-1	4.14E+0	3.19E+0	-2.02E+0	1.22E+1
RWD	kg	2.19E-3	1.83E-4	1.65E-10	2.37E-3	8.49E-5	3.13E-4	4.74E-6	-7.47E-4	2.03E-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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