Environmental Profile

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

Ecochain v3.5.80

Product:	3001659 - PVC Threaded Stopend BN 125
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

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 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	8.32E-1	1.15E-2	1.45E-4	8.44E-1	1.02E-2	4.76E-1	3.43E-3	-4.56E-1	8.78E-1
GWP-f	kg CO2 eq	9.24E-1	1.14E-2	1.46E-4	9.35E-1	1.02E-2	3.61E-1	3.43E-3	-4.88E-1	8.22E-1
GWP-b	kg CO2 eq	-9.21E-2	6.95E-6	-1.54E-6	-9.21E-2	6.19E-6	1.15E-1	4.24E-6	3.21E-2	5.50E-2
GWP-luluc	kg CO2 eq	1.01E-3	4.05E-6	1.49E-7	1.01E-3	3.61E-6	1.25E-4	8.85E-8	-5.67E-4	5.72E-4
ODP	kg CFC11 eq	4.45E-7	2.64E-9	8.26E-12	4.48E-7	2.35E-9	3.47E-8	1.25E-10	-2.20E-7	2.64E-7
AP	mol H+ eq	4.50E-3	6.52E-5	1.47E-6	4.57E-3	5.81E-5	6.00E-4	3.04E-6	-1.88E-3	3.34E-3
EP-fw	kg P eq	4.23E-5	9.42E-8	8.24E-9	4.24E-5	8.39E-8	4.19E-6	4.00E-9	-1.93E-5	2.73E-5
EP-m	kg N eq	7.95E-4	2.33E-5	1.55E-7	8.19E-4	2.08E-5	1.49E-4	2.12E-6	-3.47E-4	6.44E-4
EP-T	mol N eq	8.66E-3	2.57E-4	1.85E-6	8.92E-3	2.29E-4	1.64E-3	1.21E-5	-3.76E-3	7.04E-3
POCP	kg NMVOC eq	2.91E-3	7.35E-5	6.28E-7	2.99E-3	6.55E-5	4.89E-4	4.19E-6	-1.27E-3	2.28E-3
ADP-mm	kg Sb eq	8.18E-4	2.96E-7	1.97E-8	8.19E-4	2.64E-7	2.34E-6	3.05E-9	-9.98E-6	8.11E-4
ADP-f	MJ	2.26E+1	1.76E-1	1.36E-3	2.27E+1	1.57E-1	1.60E+0	9.11E-3	-1.14E+1	1.31E+1
WDP	m3 depriv.	1.35E+0	5.39E-4	5.22E-5	1.35E+0	4.81E-4	6.34E-2	6.06E-5	-6.65E-1	7.50E-1
PM	disease inc.	3.40E-8	1.03E-9	9.08E-12	3.51E-8	9.21E-10	7.35E-9	6.27E-11	-1.54E-8	2.80E-8
IR	kBq U-235 eq	5.23E-2	7.68E-4	1.02E-6	5.31E-2	6.84E-4	5.66E-3	4.20E-5	-2.28E-2	3.67E-2
ETP-fw	CTUe	2.71E+1	1.43E-1	1.21E-2	2.72E+1	1.27E-1	1.24E+1	1.36E-1	-8.97E+0	3.09E+1
HTP-c	CTUh	7.98E-10	5.08E-12	6.17E-13	8.04E-10	4.52E-12	1.82E-10	2.53E-13	-2.83E-10	7.07E-10
HTP-nc	CTUh	2.43E-8	1.70E-10	1.57E-11	2.45E-8	1.52E-10	4.33E-9	2.65E-11	-8.77E-9	2.03E-8
SQP	Pt	1.30E+1	1.50E-1	2.24E-3	1.32E+1	1.34E-1	9.77E-1	2.33E-2	-1.44E+1	-9.03E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.81E+0	2.52E-3	2.40E-2	4.83E+0	2.25E-3	1.15E-1	3.44E-4	-2.63E+0	2.32E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.81E+0	2.52E-3	2.40E-2	4.83E+0	2.25E-3	1.15E-1	3.44E-4	-2.63E+0	2.32E+0
PENRE	MJ	2.42E+1	1.87E-1	1.44E-3	2.44E+1	1.66E-1	1.70E+0	9.67E-3	-1.23E+1	1.40E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.42E+1	1.87E-1	1.44E-3	2.44E+1	1.66E-1	1.70E+0	9.67E-3	-1.23E+1	1.40E+1
PET	MJ	2.90E+1	1.89E-1	2.55E-2	2.92E+1	1.68E-1	1.82E+0	1.00E-2	-1.49E+1	1.63E+1
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	1.62E-2	1.99E-5	1.46E-6	1.62E-2	1.77E-5	1.80E-3	1.12E-5	-7.84E-3	1.02E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.16E-4	4.49E-7	2.73E-13	1.16E-4	4.00E-7	2.66E-6	1.11E-8	-1.02E-5	1.09E-4
NHWD	kg	9.52E-2	1.09E-2	1.05E-6	1.06E-1	9.70E-3	6.00E-2	4.00E-2	-3.94E-2	1.76E-1
RWD	kg	4.88E-5	1.19E-6	1.10E-13	5.00E-5	1.06E-6	6.08E-6	5.93E-8	-2.06E-5	3.66E-5
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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