

Environmental Profile

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

Ecochain v3.5.64



Product: 3069968 - Tegra 600 PP Cross 90° DN200 SW DK
 Unit: 1 Piece
 Manufacturer: Wavin Poland Buk
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 Poland
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LCA standard: EN15804+A2 (2019)
 Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
 Externally verified: Yes
 Issue date: 19-09-2022
 End of validity: 19-09-2027
 Verifier: Martijn van Hövell - SGS Search



This LCA was evaluated according to EN15804+A2. It was concluded that the LCA complies with this standard.

Plastic inspection chamber made of polypropylene according to DIN EN 13598-2.

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin Poland Buk (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 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	3.51E+1	1.39E+0	1.75E+0	3.82E+1	6.87E-1	5.32E+1	3.36E-1	-3.53E+1	5.72E+1
GWP-f	kg CO2 eq	6.20E+1	1.39E+0	1.65E+0	6.51E+1	6.86E-1	2.62E+1	3.36E-1	-3.52E+1	5.71E+1
GWP-b	kg CO2 eq	-2.70E+1	6.41E-4	9.37E-2	-2.69E+1	4.17E-4	2.71E+1	2.96E-4	-1.05E-1	7.22E-2
GWP-luluc	kg CO2 eq	3.46E-2	5.09E-4	5.72E-4	3.57E-2	2.43E-4	3.78E-3	5.82E-6	-1.46E-2	2.51E-2
ODP	kg CFC11 eq	3.22E-6	3.07E-7	2.11E-7	3.74E-6	1.58E-7	5.20E-7	8.49E-9	-1.95E-6	2.48E-6
AP	mol H+ eq	2.53E-1	8.06E-3	6.42E-3	2.67E-1	3.91E-3	2.29E-2	2.03E-4	-1.07E-1	1.87E-1
EP-fw	kg P eq	1.21E-3	1.40E-5	3.12E-5	1.25E-3	5.65E-6	1.10E-4	2.67E-7	-4.62E-4	9.08E-4
EP-m	kg N eq	4.45E-2	2.84E-3	9.79E-4	4.83E-2	1.40E-3	6.97E-3	1.55E-4	-2.09E-2	3.59E-2
EP-T	mol N eq	5.10E-1	3.13E-2	1.07E-2	5.52E-1	1.54E-2	7.70E-2	8.24E-4	-2.43E-1	4.02E-1
POCP	kg NMVOC eq	2.19E-1	8.94E-3	3.60E-3	2.32E-1	4.41E-3	2.37E-2	3.08E-4	-9.89E-2	1.61E-1
ADP-mm	kg Sb eq	3.44E-3	3.52E-5	6.13E-5	3.53E-3	1.77E-5	8.34E-5	2.05E-7	-3.28E-4	3.30E-3
ADP-f	MJ	2.05E+3	2.10E+1	2.09E+1	2.09E+3	1.05E+1	6.69E+1	6.20E-1	-1.04E+3	1.13E+3
WDP	m3 depriv.	4.16E+1	7.50E-2	1.99E-1	4.18E+1	3.23E-2	1.35E+0	3.25E-3	-1.78E+1	2.55E+1
PM	disease inc.	3.06E-6	1.25E-7	4.76E-8	3.23E-6	6.19E-8	3.55E-7	4.26E-9	-1.08E-6	2.57E-6
IR	kBq U-235 eq	1.78E+0	8.78E-2	3.30E-2	1.90E+0	4.60E-2	2.04E-1	2.88E-3	-5.94E-1	1.56E+0
ETP-fw	CTUe	5.67E+2	1.87E+1	4.34E+1	6.29E+2	8.55E+0	8.52E+1	5.91E-1	-2.38E+2	4.85E+2
HTP-c	CTUh	2.78E-8	6.06E-10	2.16E-9	3.05E-8	3.04E-10	1.01E-8	1.54E-11	-1.12E-8	2.97E-8
HTP-nc	CTUh	5.47E-7	2.04E-8	5.18E-8	6.19E-7	1.02E-8	1.18E-7	3.52E-10	-2.19E-7	5.28E-7
SQP	Pt	2.47E+3	1.82E+1	8.45E+0	2.50E+3	9.01E+0	5.30E+1	1.59E+0	-1.23E+3	1.33E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.33E+2	2.62E-1	7.26E+1	5.05E+2	1.51E-1	3.27E+0	2.44E-2	-2.07E+2	3.02E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.33E+2	2.62E-1	7.26E+1	5.05E+2	1.51E-1	3.27E+0	2.44E-2	-2.07E+2	3.02E+2
PENRE	MJ	2.20E+3	2.23E+1	2.27E+1	2.24E+3	1.12E+1	7.13E+1	6.58E-1	-1.12E+3	1.21E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.20E+3	2.23E+1	2.27E+1	2.24E+3	1.12E+1	7.13E+1	6.58E-1	-1.12E+3	1.21E+3
PET	MJ	2.63E+3	2.25E+1	9.52E+1	2.75E+3	1.13E+1	7.45E+1	6.82E-1	-1.33E+3	1.51E+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	7.03E-1	2.55E-3	5.68E-3	7.11E-1	1.19E-3	4.76E-2	7.65E-4	-2.74E-1	4.86E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.23E-4	5.31E-5	2.55E-5	6.02E-4	2.69E-5	1.14E-4	7.48E-7	-3.68E-4	3.76E-4
NHWD	kg	3.91E+0	1.33E+0	6.63E-2	5.30E+0	6.53E-1	3.62E+0	2.73E+0	-1.43E+0	1.09E+1
RWD	kg	1.89E-3	1.38E-4	4.70E-5	2.08E-3	7.16E-5	2.59E-4	4.05E-6	-5.78E-4	1.83E-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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