

Environmental Profile

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

Ecochain v3.5.64



Product: 3069970 - Tegra 600 PP Cross 90° DN315 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 non-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	5.70E+1	1.91E+0	2.33E+0	6.12E+1	9.36E-1	6.28E+1	4.57E-1	-4.76E+1	7.78E+1
GWP-f	kg CO2 eq	8.39E+1	1.91E+0	2.19E+0	8.80E+1	9.36E-1	3.58E+1	4.57E-1	-4.75E+1	7.77E+1
GWP-b	kg CO2 eq	-2.69E+1	8.80E-4	1.34E-1	-2.68E+1	5.68E-4	2.70E+1	4.03E-4	-1.44E-1	1.22E-1
GWP-luluc	kg CO2 eq	4.20E-2	6.98E-4	6.58E-4	4.34E-2	3.31E-4	5.15E-3	7.93E-6	-1.69E-2	3.19E-2
ODP	kg CFC11 eq	4.20E-6	4.21E-7	2.90E-7	4.91E-6	2.16E-7	7.01E-7	1.16E-8	-2.58E-6	3.26E-6
AP	mol H+ eq	3.38E-1	1.11E-2	7.60E-3	3.56E-1	5.33E-3	3.06E-2	2.77E-4	-1.39E-1	2.53E-1
EP-fw	kg P eq	1.59E-3	1.92E-5	3.58E-5	1.65E-3	7.70E-6	1.50E-4	3.63E-7	-5.93E-4	1.21E-3
EP-m	kg N eq	5.83E-2	3.89E-3	1.23E-3	6.35E-2	1.91E-3	9.27E-3	2.11E-4	-2.68E-2	4.81E-2
EP-T	mol N eq	6.66E-1	4.29E-2	1.33E-2	7.23E-1	2.10E-2	1.02E-1	1.12E-3	-3.08E-1	5.40E-1
POCP	kg NMVOC eq	2.90E-1	1.23E-2	4.46E-3	3.07E-1	6.01E-3	3.15E-2	4.20E-4	-1.28E-1	2.16E-1
ADP-mm	kg Sb eq	4.59E-3	4.83E-5	6.68E-5	4.70E-3	2.42E-5	1.13E-4	2.79E-7	-4.32E-4	4.41E-3
ADP-f	MJ	2.79E+3	2.87E+1	2.82E+1	2.84E+3	1.44E+1	9.07E+1	8.45E-1	-1.41E+3	1.54E+3
WDP	m3 depriv.	5.65E+1	1.03E-1	2.28E-1	5.68E+1	4.41E-2	1.84E+0	4.43E-3	-2.41E+1	3.46E+1
PM	disease inc.	3.83E-6	1.71E-7	5.82E-8	4.06E-6	8.45E-8	4.79E-7	5.80E-9	-1.35E-6	3.29E-6
IR	kBq U-235 eq	2.33E+0	1.20E-1	4.57E-2	2.49E+0	6.28E-2	2.76E-1	3.93E-3	-7.75E-1	2.06E+0
ETP-fw	CTUe	7.54E+2	2.56E+1	4.91E+1	8.28E+2	1.17E+1	1.15E+2	8.01E-1	-2.86E+2	6.70E+2
HTP-c	CTUh	3.50E-8	8.31E-10	2.43E-9	3.83E-8	4.15E-10	1.34E-8	2.09E-11	-1.32E-8	3.89E-8
HTP-nc	CTUh	7.40E-7	2.80E-8	5.75E-8	8.25E-7	1.39E-8	1.59E-7	4.79E-10	-2.76E-7	7.23E-7
SQP	Pt	2.52E+3	2.49E+1	9.69E+0	2.55E+3	1.23E+1	7.19E+1	2.16E+0	-1.24E+3	1.40E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.07E+2	3.60E-1	7.83E+1	5.85E+2	2.06E-1	4.45E+0	3.31E-2	-2.11E+2	3.79E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.07E+2	3.60E-1	7.83E+1	5.85E+2	2.06E-1	4.45E+0	3.31E-2	-2.11E+2	3.79E+2
PENRE	MJ	2.99E+3	3.05E+1	3.06E+1	3.05E+3	1.52E+1	9.67E+1	8.96E-1	-1.52E+3	1.64E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.99E+3	3.05E+1	3.06E+1	3.05E+3	1.52E+1	9.67E+1	8.96E-1	-1.52E+3	1.64E+3
PET	MJ	3.49E+3	3.09E+1	1.09E+2	3.63E+3	1.55E+1	1.01E+2	9.29E-1	-1.73E+3	2.02E+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	9.49E-1	3.50E-3	6.56E-3	9.59E-1	1.63E-3	6.40E-2	1.04E-3	-3.69E-1	6.57E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.50E-4	7.28E-5	3.61E-5	7.59E-4	3.67E-5	1.54E-4	1.02E-6	-4.75E-4	4.77E-4
NHWD	kg	4.91E+0	1.82E+0	9.27E-2	6.82E+0	8.90E-1	4.84E+0	3.72E+0	-1.72E+0	1.46E+1
RWD	kg	2.46E-3	1.89E-4	6.65E-5	2.72E-3	9.77E-5	3.50E-4	5.52E-6	-7.46E-4	2.42E-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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