

Environmental Profile

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

Ecochain v3.5.64



Product: 3069966 - Tegra 600 PP Bend 120° DN160 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	2.75E+1	1.21E+0	1.60E+0	3.03E+1	6.03E-1	4.98E+1	2.95E-1	-3.11E+1	4.99E+1
GWP-f	kg CO2 eq	5.45E+1	1.21E+0	1.52E+0	5.72E+1	6.02E-1	2.28E+1	2.95E-1	-3.10E+1	4.99E+1
GWP-b	kg CO2 eq	-2.70E+1	5.59E-4	8.23E-2	-2.69E+1	3.66E-4	2.71E+1	2.60E-4	-9.21E-2	5.85E-2
GWP-luluc	kg CO2 eq	3.19E-2	4.44E-4	5.59E-4	3.29E-2	2.13E-4	3.33E-3	5.10E-6	-1.38E-2	2.26E-2
ODP	kg CFC11 eq	2.82E-6	2.67E-7	1.90E-7	3.28E-6	1.39E-7	4.59E-7	7.45E-9	-1.72E-6	2.16E-6
AP	mol H+ eq	2.23E-1	7.03E-3	6.20E-3	2.36E-1	3.43E-3	2.03E-2	1.78E-4	-9.58E-2	1.64E-1
EP-fw	kg P eq	1.07E-3	1.22E-5	3.05E-5	1.11E-3	4.96E-6	9.71E-5	2.34E-7	-4.18E-4	7.98E-4
EP-m	kg N eq	3.97E-2	2.48E-3	9.20E-4	4.31E-2	1.23E-3	6.20E-3	1.36E-4	-1.90E-2	3.17E-2
EP-T	mol N eq	4.55E-1	2.73E-2	1.01E-2	4.92E-1	1.35E-2	6.84E-2	7.23E-4	-2.21E-1	3.54E-1
POCP	kg NMVOC eq	1.94E-1	7.79E-3	3.41E-3	2.06E-1	3.87E-3	2.10E-2	2.71E-4	-8.90E-2	1.42E-1
ADP-mm	kg Sb eq	2.98E-3	3.07E-5	6.12E-5	3.08E-3	1.56E-5	7.35E-5	1.80E-7	-2.91E-4	2.87E-3
ADP-f	MJ	1.80E+3	1.83E+1	1.89E+1	1.84E+3	9.25E+0	5.89E+1	5.44E-1	-9.13E+2	9.94E+2
WDP	m3 depriv.	3.64E+1	6.54E-2	1.94E-1	3.67E+1	2.84E-2	1.19E+0	2.83E-3	-1.56E+1	2.22E+1
PM	disease inc.	2.79E-6	1.09E-7	4.53E-8	2.94E-6	5.44E-8	3.14E-7	3.74E-9	-9.89E-7	2.32E-6
IR	kBq U-235 eq	1.58E+0	7.66E-2	2.95E-2	1.68E+0	4.04E-2	1.80E-1	2.53E-3	-5.33E-1	1.37E+0
ETP-fw	CTUe	4.98E+2	1.63E+1	4.26E+1	5.56E+2	7.51E+0	7.49E+1	5.18E-1	-2.22E+2	4.18E+2
HTP-c	CTUh	2.51E-8	5.28E-10	2.13E-9	2.78E-8	2.67E-10	8.94E-9	1.35E-11	-1.05E-8	2.65E-8
HTP-nc	CTUh	4.77E-7	1.78E-8	5.14E-8	5.46E-7	8.95E-9	1.04E-7	3.09E-10	-2.00E-7	4.60E-7
SQP	Pt	2.46E+3	1.59E+1	8.26E+0	2.48E+3	7.91E+0	4.67E+1	1.40E+0	-1.23E+3	1.31E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.03E+2	2.29E-1	7.27E+1	4.76E+2	1.33E-1	2.88E+0	2.14E-2	-2.05E+2	2.74E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.03E+2	2.29E-1	7.27E+1	4.76E+2	1.33E-1	2.88E+0	2.14E-2	-2.05E+2	2.74E+2
PENRE	MJ	1.93E+3	1.94E+1	2.06E+1	1.97E+3	9.82E+0	6.28E+1	5.78E-1	-9.85E+2	1.06E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.93E+3	1.94E+1	2.06E+1	1.97E+3	9.82E+0	6.28E+1	5.78E-1	-9.85E+2	1.06E+3
PET	MJ	2.33E+3	1.96E+1	9.32E+1	2.45E+3	9.95E+0	6.57E+1	5.99E-1	-1.19E+3	1.33E+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	6.16E-1	2.23E-3	5.54E-3	6.23E-1	1.05E-3	4.20E-2	6.71E-4	-2.43E-1	4.24E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.77E-4	4.63E-5	2.26E-5	5.46E-4	2.37E-5	1.01E-4	6.56E-7	-3.30E-4	3.41E-4
NHWD	kg	3.56E+0	1.16E+0	5.90E-2	4.78E+0	5.73E-1	3.20E+0	2.40E+0	-1.33E+0	9.62E+0
RWD	kg	1.68E-3	1.20E-4	4.16E-5	1.84E-3	6.29E-5	2.29E-4	3.56E-6	-5.21E-4	1.62E-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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