

Environmental Profile

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

Ecochain v3.5.64



Product: 3069957 - Tegra 600 PP Bend 90° DN315 SW DK
 Unit: 1 Piece
 Manufacturer: Wavin Poland Buk
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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					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 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	4.22E+1	1.56E+0	1.97E+0	4.58E+1	7.72E-1	5.62E+1	3.77E-1	-3.94E+1	6.37E+1
GWP-f	kg CO2 eq	6.92E+1	1.56E+0	1.86E+0	7.26E+1	7.72E-1	2.92E+1	3.77E-1	-3.93E+1	6.36E+1
GWP-b	kg CO2 eq	-2.70E+1	7.21E-4	1.07E-1	-2.68E+1	4.69E-4	2.71E+1	3.32E-4	-1.19E-1	9.11E-2
GWP-luluc	kg CO2 eq	3.68E-2	5.72E-4	6.24E-4	3.80E-2	2.73E-4	4.26E-3	6.53E-6	-1.54E-2	2.71E-2
ODP	kg CFC11 eq	3.45E-6	3.45E-7	2.39E-7	4.04E-6	1.78E-7	5.82E-7	9.53E-9	-2.14E-6	2.66E-6
AP	mol H+ eq	2.80E-1	9.06E-3	7.05E-3	2.96E-1	4.40E-3	2.55E-2	2.28E-4	-1.18E-1	2.08E-1
EP-fw	kg P eq	1.33E-3	1.58E-5	3.40E-5	1.38E-3	6.35E-6	1.24E-4	2.99E-7	-5.07E-4	1.00E-3
EP-m	kg N eq	4.89E-2	3.19E-3	1.09E-3	5.32E-2	1.57E-3	7.75E-3	1.73E-4	-2.29E-2	3.97E-2
EP-T	mol N eq	5.59E-1	3.52E-2	1.19E-2	6.07E-1	1.73E-2	8.56E-2	9.24E-4	-2.65E-1	4.45E-1
POCP	kg NMVOC eq	2.42E-1	1.00E-2	3.99E-3	2.56E-1	4.96E-3	2.64E-2	3.46E-4	-1.09E-1	1.79E-1
ADP-mm	kg Sb eq	3.71E-3	3.96E-5	6.63E-5	3.81E-3	2.00E-5	9.37E-5	2.30E-7	-3.60E-4	3.57E-3
ADP-f	MJ	2.30E+3	2.36E+1	2.35E+1	2.34E+3	1.18E+1	7.51E+1	6.96E-1	-1.16E+3	1.27E+3
WDP	m3 depriv.	4.64E+1	8.42E-2	2.17E-1	4.67E+1	3.64E-2	1.52E+0	3.63E-3	-1.99E+1	2.84E+1
PM	disease inc.	3.30E-6	1.40E-7	5.26E-8	3.49E-6	6.97E-8	3.98E-7	4.78E-9	-1.17E-6	2.79E-6
IR	kBq U-235 eq	1.94E+0	9.87E-2	3.74E-2	2.07E+0	5.18E-2	2.29E-1	3.24E-3	-6.55E-1	1.70E+0
ETP-fw	CTUe	6.19E+2	2.10E+1	4.72E+1	6.88E+2	9.62E+0	9.51E+1	6.59E-1	-2.54E+2	5.39E+2
HTP-c	CTUh	2.99E-8	6.81E-10	2.35E-9	3.29E-8	3.42E-10	1.12E-8	1.72E-11	-1.18E-8	3.26E-8
HTP-nc	CTUh	6.04E-7	2.30E-8	5.62E-8	6.83E-7	1.15E-8	1.32E-7	3.94E-10	-2.38E-7	5.88E-7
SQP	Pt	2.49E+3	2.04E+1	9.22E+0	2.52E+3	1.01E+1	5.95E+1	1.78E+0	-1.24E+3	1.35E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.50E+2	2.95E-1	7.83E+1	5.29E+2	1.70E-1	3.68E+0	2.73E-2	-2.08E+2	3.25E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.50E+2	2.95E-1	7.83E+1	5.29E+2	1.70E-1	3.68E+0	2.73E-2	-2.08E+2	3.25E+2
PENRE	MJ	2.46E+3	2.50E+1	2.56E+1	2.51E+3	1.26E+1	8.01E+1	7.38E-1	-1.25E+3	1.35E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.46E+3	2.50E+1	2.56E+1	2.51E+3	1.26E+1	8.01E+1	7.38E-1	-1.25E+3	1.35E+3
PET	MJ	2.91E+3	2.53E+1	1.04E+2	3.04E+3	1.27E+1	8.37E+1	7.66E-1	-1.46E+3	1.68E+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	7.80E-1	2.87E-3	6.21E-3	7.89E-1	1.34E-3	5.29E-2	8.58E-4	-3.07E-1	5.38E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.60E-4	5.97E-5	2.91E-5	6.49E-4	3.03E-5	1.28E-4	8.39E-7	-4.02E-4	4.06E-4
NHWD	kg	4.21E+0	1.49E+0	7.53E-2	5.78E+0	7.34E-1	4.03E+0	3.06E+0	-1.53E+0	1.21E+1
RWD	kg	2.05E-3	1.55E-4	5.36E-5	2.26E-3	8.06E-5	2.91E-4	4.55E-6	-6.34E-4	2.00E-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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