

Environmental Profile

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

Ecochain v3.5.64



Product: 3069958 - Tegra 600 PP Bend 90° DN160 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	2.66E+1	1.19E+0	1.59E+0	2.94E+1	5.91E-1	4.95E+1	2.89E-1	-3.06E+1	4.92E+1
GWP-f	kg CO2 eq	5.36E+1	1.19E+0	1.51E+0	5.63E+1	5.90E-1	2.24E+1	2.89E-1	-3.05E+1	4.91E+1
GWP-b	kg CO2 eq	-2.70E+1	5.48E-4	8.26E-2	-2.69E+1	3.59E-4	2.71E+1	2.55E-4	-9.01E-2	5.72E-2
GWP-luluc	kg CO2 eq	3.17E-2	4.35E-4	5.47E-4	3.26E-2	2.09E-4	3.26E-3	5.01E-6	-1.37E-2	2.24E-2
ODP	kg CFC11 eq	2.81E-6	2.62E-7	1.89E-7	3.26E-6	1.36E-7	4.50E-7	7.31E-9	-1.69E-6	2.16E-6
AP	mol H+ eq	2.20E-1	6.89E-3	6.09E-3	2.33E-1	3.36E-3	1.99E-2	1.75E-4	-9.42E-2	1.62E-1
EP-fw	kg P eq	1.06E-3	1.20E-5	2.99E-5	1.10E-3	4.86E-6	9.51E-5	2.29E-7	-4.11E-4	7.88E-4
EP-m	kg N eq	3.92E-2	2.43E-3	9.10E-4	4.25E-2	1.20E-3	6.09E-3	1.34E-4	-1.87E-2	3.12E-2
EP-T	mol N eq	4.49E-1	2.68E-2	1.00E-2	4.86E-1	1.33E-2	6.73E-2	7.09E-4	-2.18E-1	3.49E-1
POCP	kg NMVOC eq	1.92E-1	7.64E-3	3.36E-3	2.03E-1	3.79E-3	2.06E-2	2.65E-4	-8.76E-2	1.40E-1
ADP-mm	kg Sb eq	2.98E-3	3.01E-5	5.97E-5	3.07E-3	1.53E-5	7.21E-5	1.76E-7	-2.88E-4	2.87E-3
ADP-f	MJ	1.77E+3	1.79E+1	1.89E+1	1.81E+3	9.06E+0	5.78E+1	5.34E-1	-8.96E+2	9.77E+2
WDP	m3 depriv.	3.58E+1	6.41E-2	1.90E-1	3.60E+1	2.78E-2	1.17E+0	2.78E-3	-1.53E+1	2.19E+1
PM	disease inc.	2.76E-6	1.07E-7	4.47E-8	2.91E-6	5.33E-8	3.08E-7	3.67E-9	-9.76E-7	2.30E-6
IR	kBq U-235 eq	1.56E+0	7.50E-2	2.95E-2	1.66E+0	3.96E-2	1.76E-1	2.48E-3	-5.24E-1	1.36E+0
ETP-fw	CTUe	4.93E+2	1.60E+1	4.17E+1	5.51E+2	7.36E+0	7.36E+1	5.09E-1	-2.20E+2	4.13E+2
HTP-c	CTUh	2.49E-8	5.18E-10	2.08E-9	2.75E-8	2.62E-10	8.78E-9	1.32E-11	-1.04E-8	2.62E-8
HTP-nc	CTUh	4.72E-7	1.75E-8	5.02E-8	5.39E-7	8.77E-9	1.02E-7	3.03E-10	-1.97E-7	4.53E-7
SQP	Pt	2.46E+3	1.55E+1	8.09E+0	2.48E+3	7.76E+0	4.57E+1	1.37E+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	2.24E-1	7.08E+1	4.74E+2	1.30E-1	2.82E+0	2.10E-2	-2.05E+2	2.72E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.03E+2	2.24E-1	7.08E+1	4.74E+2	1.30E-1	2.82E+0	2.10E-2	-2.05E+2	2.72E+2
PENRE	MJ	1.90E+3	1.90E+1	2.05E+1	1.94E+3	9.62E+0	6.16E+1	5.67E-1	-9.66E+2	1.04E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.90E+3	1.90E+1	2.05E+1	1.94E+3	9.62E+0	6.16E+1	5.67E-1	-9.66E+2	1.04E+3
PET	MJ	2.30E+3	1.92E+1	9.13E+1	2.41E+3	9.75E+0	6.44E+1	5.88E-1	-1.17E+3	1.31E+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	6.06E-1	2.18E-3	5.43E-3	6.14E-1	1.03E-3	4.13E-2	6.59E-4	-2.38E-1	4.18E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.74E-4	4.54E-5	2.26E-5	5.42E-4	2.32E-5	9.87E-5	6.44E-7	-3.26E-4	3.39E-4
NHWD	kg	3.53E+0	1.14E+0	5.91E-2	4.72E+0	5.62E-1	3.15E+0	2.35E+0	-1.31E+0	9.47E+0
RWD	kg	1.67E-3	1.18E-4	4.17E-5	1.82E-3	6.16E-5	2.24E-4	3.49E-6	-5.13E-4	1.60E-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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