

# Environmental Profile

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

Ecochain v3.5.64



Product: 3069990 - Tegra 600 PP Straight DN315 UR-ID DK  
 Unit: 1 Piece  
 Manufacturer: Wavin Poland Buk  
 Address: Dobieżyńska 43  
 64-320 Buk  
 Poland  
 Contact: <https://www.wavin.com/en-en>

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	3.92E+1	1.50E+0	1.99E+0	4.27E+1	7.43E-1	5.45E+1	3.61E-1	-3.78E+1	6.05E+1
GWP-f	kg CO2 eq	6.61E+1	1.50E+0	1.88E+0	6.95E+1	7.42E-1	2.75E+1	3.61E-1	-3.77E+1	6.04E+1
GWP-b	kg CO2 eq	-2.69E+1	6.94E-4	1.08E-1	-2.68E+1	4.51E-4	2.71E+1	3.18E-4	-1.15E-1	1.03E-1
GWP-luluc	kg CO2 eq	3.55E-2	5.51E-4	6.26E-4	3.66E-2	2.63E-4	4.11E-3	6.25E-6	-1.51E-2	2.59E-2
ODP	kg CFC11 eq	3.19E-6	3.32E-7	2.42E-7	3.76E-6	1.71E-7	5.61E-7	9.12E-9	-2.04E-6	2.46E-6
AP	mol H+ eq	2.67E-1	8.72E-3	7.08E-3	2.82E-1	4.23E-3	2.46E-2	2.18E-4	-1.14E-1	1.97E-1
EP-fw	kg P eq	1.26E-3	1.52E-5	3.41E-5	1.31E-3	6.11E-6	1.20E-4	2.86E-7	-4.92E-4	9.46E-4
EP-m	kg N eq	4.68E-2	3.07E-3	1.09E-3	5.10E-2	1.51E-3	7.47E-3	1.64E-4	-2.22E-2	3.79E-2
EP-T	mol N eq	5.36E-1	3.39E-2	1.20E-2	5.82E-1	1.67E-2	8.24E-2	8.85E-4	-2.57E-1	4.25E-1
POCP	kg NMVOC eq	2.31E-1	9.67E-3	4.01E-3	2.45E-1	4.76E-3	2.54E-2	3.31E-4	-1.06E-1	1.70E-1
ADP-mm	kg Sb eq	3.35E-3	3.81E-5	6.63E-5	3.45E-3	1.92E-5	9.04E-5	2.20E-7	-3.41E-4	3.22E-3
ADP-f	MJ	2.20E+3	2.27E+1	2.38E+1	2.25E+3	1.14E+1	7.25E+1	6.67E-1	-1.12E+3	1.21E+3
WDP	m3 depriv.	4.44E+1	8.11E-2	2.17E-1	4.47E+1	3.50E-2	1.46E+0	3.48E-3	-1.92E+1	2.70E+1
PM	disease inc.	3.17E-6	1.35E-7	5.29E-8	3.36E-6	6.70E-8	3.84E-7	4.58E-9	-1.14E-6	2.67E-6
IR	kBq U-235 eq	1.82E+0	9.50E-2	3.78E-2	1.95E+0	4.98E-2	2.21E-1	3.10E-3	-6.32E-1	1.59E+0
ETP-fw	CTUe	5.85E+2	2.02E+1	4.73E+1	6.52E+2	9.25E+0	9.08E+1	6.25E-1	-2.48E+2	5.05E+2
HTP-c	CTUh	2.88E-8	6.56E-10	2.35E-9	3.18E-8	3.29E-10	1.08E-8	1.65E-11	-1.16E-8	3.13E-8
HTP-nc	CTUh	5.75E-7	2.21E-8	5.63E-8	6.53E-7	1.10E-8	1.27E-7	3.76E-10	-2.32E-7	5.60E-7
SQP	Pt	2.48E+3	1.97E+1	9.24E+0	2.51E+3	9.74E+0	5.74E+1	1.71E+0	-1.24E+3	1.34E+3
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.40E+2	2.84E-1	7.83E+1	5.19E+2	1.63E-1	3.55E+0	2.61E-2	-2.08E+2	3.15E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.40E+2	2.84E-1	7.83E+1	5.19E+2	1.63E-1	3.55E+0	2.61E-2	-2.08E+2	3.15E+2
PENRE	MJ	2.36E+3	2.41E+1	2.58E+1	2.41E+3	1.21E+1	7.72E+1	7.07E-1	-1.21E+3	1.29E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.36E+3	2.41E+1	2.58E+1	2.41E+3	1.21E+1	7.72E+1	7.07E-1	-1.21E+3	1.29E+3
PET	MJ	2.80E+3	2.43E+1	1.04E+2	2.93E+3	1.23E+1	8.08E+1	7.33E-1	-1.41E+3	1.61E+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	7.43E-1	2.76E-3	6.23E-3	7.52E-1	1.29E-3	5.03E-2	8.22E-4	-2.96E-1	5.08E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.37E-4	5.74E-5	2.95E-5	6.24E-4	2.91E-5	1.23E-4	8.04E-7	-3.85E-4	3.92E-4
NHWD	kg	4.06E+0	1.44E+0	7.62E-2	5.57E+0	7.06E-1	3.89E+0	2.93E+0	-1.49E+0	1.16E+1
RWD	kg	1.91E-3	1.49E-4	5.42E-5	2.11E-3	7.75E-5	2.80E-4	4.35E-6	-6.12E-4	1.87E-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



Ecochain Technologies BV  
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands  
<https://www.ecochain.com>  
+31 20 3035 777