Environmental Profile

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

Ecochain v4.0.3

Product:	3041546 - Tegra NG2 1000 PP Straight DN250 SW
Unit:	1 piece
Manufacturer:	Wavin

Wavin's Tegra drains that Wavin offers are also part of a sustainable total solution for your sewer system. Your system becomes accessible for inspection and maintenance-friendly thanks to our flow profiles. Tegra wells are resistant to acids, bases and solvents.

LCA standard:	EN15804+A2 (2019)
Standard database:	Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified:	Yes
Issue date:	26-07-2023
End of validity:	26-07-2028
Verifier:	Martijn van Hövell - SGS Search

This LCA was evaluated according to EN15804+A2. It was concluded that the LCA complies with this standard.

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin (2021). (☑ = 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 EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 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]

Statement of Confidentiality

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.20E+2	4.77E+0	1.75E+0	1.27E+2	1.69E+0	6.30E+1	7.95E-1	-7.88E+1	1.13E+2
GWP-f	kg CO2 eq	1.37E+2	4.77E+0	1.77E+0	1.43E+2	1.69E+0	4.91E+1	7.95E-1	-7.86E+1	1.16E+2
GWP-b	kg CO2 eq	-1.64E+1	2.20E-3	-2.07E-2	-1.64E+1	1.02E-3	1.39E+1	6.92E-4	-2.68E-1	-2.76E+0
GWP-luluc	kg CO2 eq	4.78E-2	1.75E-3	1.93E-3	5.15E-2	5.97E-4	9.50E-3	1.35E-5	-2.14E-2	4.01E-2
ODP	kg CFC11 eq	4.24E-6	1.05E-6	9.99E-8	5.40E-6	3.89E-7	1.25E-6	1.99E-8	-3.08E-6	3.97E-6
AP	mol H+ eq	5.09E-1	2.77E-2	1.94E-2	5.56E-1	9.61E-3	5.23E-2	4.75E-4	-2.28E-1	3.91E-1
EP-fw	kg P eq	2.17E-3	4.81E-5	1.10E-4	2.32E-3	1.39E-5	2.74E-4	6.20E-7	-9.30E-4	1.68E-3
EP-m	kg N eq	8.71E-2	9.75E-3	1.99E-3	9.88E-2	3.44E-3	1.52E-2	3.10E-4	-4.14E-2	7.64E-2
EP-T	mol N eq	1.00E+0	1.07E-1	2.37E-2	1.13E+0	3.79E-2	1.68E-1	1.93E-3	-4.60E-1	8.78E-1
POCP	kg NMVOC eq	4.42E-1	3.07E-2	7.96E-3	4.81E-1	1.08E-2	5.30E-2	7.25E-4	-2.09E-1	3.36E-1
ADP-mm	kg Sb eq	3.41E-3	1.21E-4	2.48E-4	3.78E-3	4.36E-5	2.07E-4	4.79E-7	-5.39E-4	3.50E-3
ADP-f	MJ	4.75E+3	7.19E+1	1.69E+1	4.84E+3	2.59E+1	1.65E+2	1.46E+0	-2.45E+3	2.58E+3
WDP	m3 depriv.	9.19E+1	2.57E-1	6.86E-1	9.28E+1	7.94E-2	3.23E+0	7.32E-3	-4.23E+1	5.38E+1
PM	disease inc.	4.91E-6	4.28E-7	1.16E-7	5.45E-6	1.52E-7	8.59E-7	1.00E-8	-2.05E-6	4.43E-6
IR	kBq U-235 eq	2.93E+0	3.01E-1	1.25E-2	3.25E+0	1.13E-1	5.00E-1	6.75E-3	-1.21E+0	2.65E+0
ETP-fw	CTUe	9.48E+2	6.42E+1	1.60E+2	1.17E+3	2.10E+1	1.86E+2	1.22E+0	-3.52E+2	1.03E+3
HTP-c	CTUh	4.61E-8	2.08E-9	8.22E-9	5.64E-8	7.48E-10	2.26E-8	3.55E-11	-1.78E-8	6.20E-8
HTP-nc	CTUh	1.04E-6	7.02E-8	2.06E-7	1.32E-6	2.51E-8	2.77E-7	7.84E-10	-4.03E-7	1.22E-6
SQP	Pt	1.68E+3	6.24E+1	2.89E+1	1.77E+3	2.21E+1	1.32E+2	3.73E+0	-1.04E+3	8.85E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.91E+2	9.01E-1	3.13E+2	7.05E+2	3.71E-1	8.13E+0	5.64E-2	-1.77E+2	5.37E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.91E+2	9.01E-1	3.13E+2	7.05E+2	3.71E-1	8.13E+0	5.64E-2	-1.77E+2	5.37E+2
PENRE	MJ	5.10E+3	7.64E+1	1.80E+1	5.19E+3	2.75E+1	1.76E+2	1.54E+0	-2.64E+3	2.75E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.10E+3	7.64E+1	1.80E+1	5.19E+3	2.75E+1	1.76E+2	1.54E+0	-2.64E+3	2.75E+3
PET	MJ	5.49E+3	7.73E+1	3.31E+2	5.90E+3	2.79E+1	1.84E+2	1.60E+0	-2.82E+3	3.29E+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	1.41E+0	8.76E-3	1.90E-2	1.44E+0	2.93E-3	9.52E-2	1.79E-3	-6.42E-1	8.96E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.00E-4	1.82E-4	3.58E-9	1.08E-3	6.62E-5	2.69E-4	1.75E-6	-6.37E-4	7.82E-4
NHWD	kg	8.35E+0	4.56E+0	1.41E-2	1.29E+1	1.60E+0	8.12E+0	6.41E+0	-2.40E+0	2.67E+1
RWD	kg	2.89E-3	4.72E-4	1.33E-9	3.36E-3	1.76E-4	6.34E-4	9.50E-6	-1.12E-3	3.06E-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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