

# Environmental Profile

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

Ecochain v4.3.1



Product: 3040350 - PPr Socket GY 25  
 Unit: 1 piece  
 Manufacturer: Wavin - TR - Adana  
 Location: Güzelevler Mahallesi  
 Address: Girne Bulvarı 294  
 01321 Adana  
 Turkey

LCA standard: EN15804+A2 (2019)  
 Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off  
 Externally verified: Yes  
 Issue date: 04-10-2022  
 End of validity: 04-10-2027  
 Verifier: Martijn van Hövell - SGS Search



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

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - TR - Adana (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 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-f** = EF Resource use, fossils [MJ]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **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

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# Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.21E-2	2.66E-3	8.84E-4	4.57E-2	7.90E-4	4.21E-2	3.71E-4	-2.29E-2	6.60E-2
GWP-f	kg CO2 eq	4.22E-2	2.65E-3	8.54E-4	4.57E-2	7.90E-4	4.05E-2	3.72E-4	-2.47E-2	6.27E-2
GWP-b	kg CO2 eq	-9.77E-5	-2.55E-7	2.98E-5	-6.81E-5	4.80E-7	1.62E-3	3.21E-7	1.82E-3	3.38E-3
GWP-luluc	kg CO2 eq	2.75E-5	1.59E-6	5.21E-7	2.96E-5	2.79E-7	4.66E-6	6.79E-9	-1.70E-5	1.76E-5
ODP	kg CFC11 eq	1.23E-9	5.47E-10	6.85E-11	1.84E-9	1.82E-10	6.73E-10	9.36E-12	-1.35E-9	1.35E-9
AP	mol H+ eq	1.70E-4	6.67E-5	5.43E-6	2.42E-4	4.50E-6	2.88E-5	2.25E-7	-6.48E-5	2.10E-4
EP-fw	kg P eq	9.20E-7	1.49E-8	6.82E-8	1.00E-6	6.50E-9	1.36E-7	3.05E-10	-3.77E-7	7.69E-7
EP-m	kg N eq	2.99E-5	1.68E-5	1.89E-6	4.87E-5	1.61E-6	8.88E-6	1.42E-7	-1.25E-5	4.68E-5
EP-T	mol N eq	3.36E-4	1.87E-4	1.28E-5	5.36E-4	1.77E-5	9.77E-5	9.10E-7	-1.39E-4	5.13E-4
POCP	kg NMVOC eq	1.40E-4	4.89E-5	4.18E-6	1.93E-4	5.07E-6	3.03E-5	3.41E-7	-5.75E-5	1.72E-4
ADP-f	MJ	1.33E+0	3.56E-2	8.48E-3	1.38E+0	1.21E-2	8.38E-2	6.85E-4	-6.89E-1	7.85E-1
ADP-mm	kg Sb eq	7.57E-7	3.27E-8	6.78E-8	8.58E-7	2.04E-8	1.08E-7	2.31E-10	-1.37E-7	8.50E-7
WDP	m3 depriv.	2.97E-2	7.44E-5	1.76E-3	3.15E-2	3.72E-5	1.59E-3	5.05E-6	-1.31E-2	2.00E-2
PM	disease inc.	1.51E-9	1.24E-10	7.46E-11	1.71E-9	7.13E-11	4.56E-10	4.71E-12	-6.27E-10	1.61E-9
IR	kBq U-235 eq	9.27E-4	1.51E-4	2.55E-5	1.10E-3	5.30E-5	2.59E-4	3.15E-6	-4.15E-4	1.00E-3
ETP-fw	CTUe	5.69E-1	2.56E-2	4.59E-2	6.40E-1	9.84E-3	1.00E-1	5.73E-4	-2.22E-1	5.28E-1
HTP-c	CTUh	1.21E-11	1.41E-12	2.79E-12	1.63E-11	3.50E-13	1.41E-11	1.79E-14	-4.54E-12	2.62E-11
HTP-nc	CTUh	3.31E-10	2.34E-11	4.93E-11	4.03E-10	1.17E-11	1.57E-10	3.76E-13	-1.30E-10	4.42E-10
SQP	Pt	1.63E-1	1.26E-2	1.13E-2	1.87E-1	1.04E-2	6.62E-2	1.75E-3	-3.57E-1	-9.19E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.29E-2	2.93E-4	1.54E-1	1.97E-1	1.74E-4	4.02E-3	2.56E-5	-6.90E-2	1.33E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.29E-2	2.93E-4	1.54E-1	1.97E-1	1.74E-4	4.02E-3	2.56E-5	-6.90E-2	1.33E-1
PENRE	MJ	1.43E+0	3.78E-2	9.01E-3	1.48E+0	1.29E-2	8.93E-2	7.27E-4	-7.44E-1	8.36E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.43E+0	3.78E-2	9.01E-3	1.48E+0	1.29E-2	8.93E-2	7.27E-4	-7.44E-1	8.36E-1
PET	MJ	1.47E+0	3.81E-2	1.63E-1	1.67E+0	1.30E-2	9.33E-2	7.53E-4	-8.13E-1	9.68E-1
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	5.35E-4	2.58E-6	4.22E-5	5.80E-4	1.37E-6	4.97E-5	8.37E-7	-2.29E-4	4.03E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.49E-7	5.08E-8	5.46E-8	3.54E-7	3.10E-8	1.45E-7	8.40E-10	-2.61E-7	2.70E-7
NHWD	kg	2.54E-3	7.30E-4	1.01E-3	4.28E-3	7.51E-4	4.82E-3	3.00E-3	-6.33E-4	1.22E-2
RWD	kg	8.08E-7	2.43E-7	3.12E-8	1.08E-6	8.24E-8	3.33E-7	4.45E-9	-3.91E-7	1.11E-6
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	3.69E-2	3.69E-2	0	0	0	0	3.69E-2
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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