

Environmental Profile

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

Ecochain v4.3.1



Product: 3050911 - PPr Socket WT 20
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					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 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]; **PENRT** = 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	3.78E-2	2.12E-3	5.68E-4	4.05E-2	6.32E-4	3.68E-2	2.96E-4	-1.95E-2	5.87E-2
GWP-f	kg CO2 eq	3.80E-2	2.12E-3	5.49E-4	4.07E-2	6.32E-4	3.57E-2	2.96E-4	-2.07E-2	5.66E-2
GWP-b	kg CO2 eq	-4.00E-4	-8.34E-8	1.92E-5	-3.81E-4	3.84E-7	1.08E-3	2.51E-7	1.21E-3	1.90E-3
GWP-luluc	kg CO2 eq	1.70E-4	1.22E-6	3.35E-7	1.72E-4	2.24E-7	3.74E-6	6.09E-9	-1.19E-5	1.64E-4
ODP	kg CFC11 eq	1.82E-9	4.40E-10	4.40E-11	2.30E-9	1.46E-10	5.40E-10	7.53E-12	-1.18E-9	1.82E-9
AP	mol H+ eq	2.41E-4	4.89E-5	3.49E-6	2.94E-4	3.60E-6	2.33E-5	1.84E-7	-5.16E-5	2.69E-4
EP-fw	kg P eq	1.02E-6	1.28E-8	4.38E-8	1.08E-6	5.20E-9	1.09E-7	2.65E-10	-2.82E-7	9.13E-7
EP-m	kg N eq	3.16E-5	1.25E-5	1.22E-6	4.53E-5	1.29E-6	7.22E-6	1.09E-7	-9.99E-6	4.39E-5
EP-T	mol N eq	3.26E-4	1.38E-4	8.25E-6	4.73E-4	1.42E-5	7.95E-5	7.37E-7	-1.11E-4	4.56E-4
POCP	kg NMVOC eq	1.36E-4	3.63E-5	2.69E-6	1.75E-4	4.06E-6	2.46E-5	2.75E-7	-4.63E-5	1.57E-4
ADP-f	MJ	1.12E+0	2.87E-2	5.45E-3	1.15E+0	9.70E-3	6.73E-2	5.53E-4	-5.68E-1	6.64E-1
ADP-mm	kg Sb eq	4.51E-7	2.89E-8	4.36E-8	5.24E-7	1.63E-8	8.65E-8	1.94E-10	-1.09E-7	5.18E-7
WDP	m3 depriv.	2.91E-2	6.47E-5	1.13E-3	3.03E-2	2.98E-5	1.27E-3	6.37E-6	-1.02E-2	2.14E-2
PM	disease inc.	1.56E-9	1.08E-10	4.80E-11	1.72E-9	5.70E-11	3.67E-10	3.81E-12	-4.81E-10	1.66E-9
IR	kBq U-235 eq	1.08E-3	1.22E-4	1.64E-5	1.22E-3	4.24E-5	2.08E-4	2.50E-6	-3.23E-4	1.15E-3
ETP-fw	CTUe	5.83E-1	2.12E-2	2.95E-2	6.34E-1	7.87E-3	8.06E-2	4.62E-4	-1.60E-1	5.62E-1
HTP-c	CTUh	2.55E-11	1.10E-12	1.80E-12	2.84E-11	2.80E-13	1.30E-11	1.62E-14	-3.57E-12	3.81E-11
HTP-nc	CTUh	4.16E-10	1.99E-11	3.17E-11	4.68E-10	9.39E-12	1.32E-10	3.14E-13	-1.00E-10	5.09E-10
SQP	Pt	1.82E-1	1.18E-2	7.28E-3	2.01E-1	8.30E-3	5.33E-2	1.40E-3	-2.41E-1	2.28E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.43E-2	2.47E-4	9.91E-2	1.44E-1	1.39E-4	3.23E-3	1.94E-5	-4.71E-2	9.99E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.43E-2	2.47E-4	9.91E-2	1.44E-1	1.39E-4	3.23E-3	1.94E-5	-4.71E-2	9.99E-2
PENRE	MJ	1.20E+0	3.05E-2	5.80E-3	1.24E+0	1.03E-2	7.17E-2	5.87E-4	-6.14E-1	7.05E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.20E+0	3.05E-2	5.80E-3	1.24E+0	1.03E-2	7.17E-2	5.87E-4	-6.14E-1	7.05E-1
PET	MJ	1.24E+0	3.07E-2	1.05E-1	1.38E+0	1.04E-2	7.50E-2	6.07E-4	-6.61E-1	8.05E-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	5.79E-4	2.23E-6	2.72E-5	6.08E-4	1.10E-6	4.02E-5	6.65E-7	-1.75E-4	4.75E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.07E-6	4.48E-8	3.51E-8	1.15E-6	2.48E-8	1.18E-7	6.98E-10	-2.27E-7	1.07E-6
NHWD	kg	6.05E-3	7.24E-4	6.50E-4	7.43E-3	6.01E-4	4.03E-3	2.40E-3	-4.95E-4	1.40E-2
RWD	kg	1.06E-6	1.95E-7	2.00E-8	1.28E-6	6.59E-8	2.67E-7	3.56E-9	-3.06E-7	1.31E-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	2.37E-2	2.37E-2	0	0	0	0	2.37E-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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