

Environmental Profile

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

Ecochain v3.5.80



Product: 3084344 - EK PP-RCT SOCKET GN 40
Unit: 1 piece
Manufacturer: Wavin - CZ - Kostelec - Verified

Use the Ekoplastik System when you prefer an all plastic welded system or when you need pipes with larger diameters. The Ekoplastik system offers a maximum pipe diameter of 250 mm. Join pipes and fittings using a homogenous weld for secure and permanent connections.

LCA standard: NMD Bepalingsmethode 1.1 (2022)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 27-01-2023
End of validity: 27-01-2028
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 - CZ - Kostelec - Verified (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

ECI = Environmental Costs Indicator [euro]; **ADPE** = Abiotic depletion potential for non-fossil resources [kg Sb-eq]; **ADPF** = Abiotic depletion potential for fossil resources [kg Sb-eq]; **GWP** = Global warming potential [kg CO2-eq]; **ODP** = Depletion potential of the stratospheric ozone layer [kg CFC-11-eq]; **POCP** = Formation potential of tropospheric ozone photochemical oxidants [kg ethene-eq]; **AP** = Acidification potential of land and water [kg SO2-eq]; **EP** = Eutrophication potential [kg PO4 3--eq]; **HTP** = Human toxicity potential [kg 1,4-DB-eq]; **FAETP** = Freshwater aquatic ecotoxicity potential [kg 1,4-DB-eq]; **MAETP** = Marine aquatic ecotoxicity potential [kg 1,4-DB-eq]; **TETP** = Terrestrial ecotoxicity potential [kg 1,4-DB-eq]; **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

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Results

Environmental impact SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.01	0	0	0.01	0	0	0	-0	0.01
ADPE	kg Sb-eq	1.36E-6	1.40E-7	5.45E-7	2.05E-6	2.86E-8	1.40E-7	3.16E-10	-3.58E-7	1.86E-6
ADPF	kg Sb-eq	1.46E-3	3.94E-5	4.12E-5	1.54E-3	8.05E-6	5.36E-5	4.41E-7	-7.99E-4	7.98E-4
GWP	kg CO2-eq	8.44E-2	5.37E-3	7.43E-3	9.72E-2	1.10E-3	3.34E-2	4.45E-4	-5.15E-2	8.06E-2
ODP	kg CFC-11-eq	2.02E-9	9.95E-10	1.27E-8	1.57E-8	2.03E-10	7.15E-10	1.05E-11	-2.05E-9	1.46E-8
POCP	kg ethene-eq	6.96E-5	3.22E-6	5.36E-6	7.82E-5	6.58E-7	5.38E-6	1.01E-7	-3.43E-5	5.00E-5
AP	kg SO2-eq	2.67E-4	2.31E-5	5.10E-5	3.41E-4	4.72E-6	2.74E-5	2.33E-7	-1.30E-4	2.43E-4
EP	kg PO4 3--eq	2.61E-5	4.61E-6	6.56E-6	3.73E-5	9.43E-7	4.86E-6	1.01E-7	-1.38E-5	2.94E-5
HTP	kg 1,4-DB-eq	1.36E-2	2.30E-3	9.01E-3	2.49E-2	4.69E-4	1.09E-2	3.48E-5	-6.65E-3	2.96E-2
FAETP	kg 1,4-DB-eq	4.06E-4	6.72E-5	3.25E-4	7.99E-4	1.37E-5	2.40E-4	3.76E-5	-1.93E-4	8.97E-4
MAETP	kg 1,4-DB-eq	9.12E-1	2.40E-1	9.05E-1	2.06E+0	4.91E-2	5.52E-1	3.75E-2	-4.08E-1	2.29E+0
TETP	kg 1,4-DB-eq	6.28E-5	8.13E-6	4.70E-4	5.41E-4	1.66E-6	3.33E-5	5.69E-8	-4.90E-5	5.27E-4
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	8.84E-2	5.41E-3	8.80E-3	1.03E-1	1.11E-3	3.47E-2	5.21E-4	-5.08E-2	8.81E-2
GWP-f	kg CO2 eq	8.80E-2	5.41E-3	7.10E-3	1.00E-1	1.11E-3	3.36E-2	5.21E-4	-5.34E-2	8.23E-2
GWP-b	kg CO2 eq	3.85E-4	3.29E-6	1.59E-3	1.97E-3	6.71E-7	1.15E-3	4.53E-7	2.55E-3	5.67E-3
GWP-luluc	kg CO2 eq	3.87E-5	1.91E-6	1.11E-4	1.52E-4	3.91E-7	6.29E-6	9.01E-9	-2.90E-5	1.30E-4
ODP	kg CFC11 eq	1.96E-9	1.25E-9	7.08E-9	1.03E-8	2.55E-10	8.47E-10	1.31E-11	-2.16E-9	9.24E-9
AP	mol H+ eq	3.23E-4	3.08E-5	6.44E-5	4.19E-4	6.30E-6	3.54E-5	3.13E-7	-1.57E-4	3.03E-4
EP-fw	kg P eq	1.46E-6	4.45E-8	2.34E-7	1.74E-6	9.10E-9	1.82E-7	4.11E-10	-8.02E-7	1.13E-6
EP-m	kg N eq	5.56E-5	1.10E-5	1.19E-5	7.86E-5	2.25E-6	1.04E-5	2.02E-7	-2.86E-5	6.29E-5
EP-T	mol N eq	6.23E-4	1.22E-4	1.48E-4	8.93E-4	2.48E-5	1.15E-4	1.27E-6	-3.18E-4	7.16E-4
POCP	kg NMVOC eq	2.74E-4	3.47E-5	3.43E-5	3.43E-4	7.10E-6	3.61E-5	4.76E-7	-1.39E-4	2.47E-4
ADP-mm	kg Sb eq	1.36E-6	1.40E-7	5.45E-7	2.05E-6	2.86E-8	1.40E-7	3.16E-10	-3.58E-7	1.86E-6
ADP-f	MJ	3.05E+0	8.30E-2	1.79E+0	4.92E+0	1.70E-2	1.10E-1	9.55E-4	-1.65E+0	3.40E+0
WDP	m3 depriv.	6.13E-2	2.55E-4	3.13E-2	9.29E-2	5.21E-5	2.13E-3	5.33E-6	-3.20E-2	6.31E-2
PM	disease inc.	2.90E-9	4.88E-10	5.33E-10	3.92E-9	9.98E-11	5.80E-10	6.57E-12	-1.46E-9	3.14E-9
IR	kBq U-235 eq	1.69E-3	3.63E-4	2.10E-2	2.30E-2	7.42E-5	3.36E-4	4.42E-6	-9.23E-4	2.25E-2
ETP-fw	CTUe	8.22E-1	6.74E-2	6.01E-1	1.49E+0	1.38E-2	1.27E-1	8.00E-4	-4.07E-1	1.22E+0
HTP-c	CTUh	2.17E-11	2.40E-12	1.30E-11	3.71E-11	4.90E-13	1.55E-11	2.37E-14	-1.02E-11	4.29E-11
HTP-nc	CTUh	6.03E-10	8.04E-11	4.10E-10	1.09E-9	1.64E-11	1.87E-10	5.17E-13	-2.97E-10	1.00E-9
SQP	Pt	2.23E-1	7.10E-2	4.91E-1	7.85E-1	1.45E-2	8.76E-2	2.45E-3	-5.33E-1	3.57E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.74E-2	1.19E-3	2.53E-1	3.22E-1	2.43E-4	5.39E-3	3.67E-5	-1.09E-1	2.19E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.74E-2	1.19E-3	2.53E-1	3.22E-1	2.43E-4	5.39E-3	3.67E-5	-1.09E-1	2.19E-1
PENRE	MJ	3.27E+0	8.82E-2	1.80E+0	5.16E+0	1.80E-2	1.18E-1	1.01E-3	-1.78E+0	3.51E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.27E+0	8.82E-2	1.80E+0	5.16E+0	1.80E-2	1.18E-1	1.01E-3	-1.78E+0	3.51E+0
PET	MJ	3.34E+0	8.94E-2	2.05E+0	5.48E+0	1.83E-2	1.23E-1	1.05E-3	-1.89E+0	3.73E+0
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	9.56E-4	9.40E-6	1.01E-3	1.97E-3	1.92E-6	6.33E-5	1.18E-6	-5.22E-4	1.51E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.35E-7	2.12E-7	3.53E-8	6.83E-7	4.34E-8	1.83E-7	1.16E-9	-4.19E-7	4.91E-7
NHWD	kg	3.96E-3	5.15E-3	1.01E-3	1.01E-2	1.05E-3	5.45E-3	4.20E-3	-1.46E-3	1.94E-2
RWD	kg	1.48E-6	5.65E-7	5.29E-8	2.10E-6	1.15E-7	4.28E-7	6.23E-9	-8.40E-7	1.81E-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	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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