

Environmental Profile

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

Ecochain v3.5.80



Product: 3083472 - EK PP-RCT SOCKET GN 50
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	0.02	0	0	0	-0.01	0.01
ADPE	kg Sb-eq	2.32E-6	2.15E-7	8.90E-7	3.42E-6	4.63E-8	2.25E-7	5.14E-10	-5.73E-7	3.12E-6
ADPF	kg Sb-eq	2.38E-3	6.04E-5	6.70E-5	2.51E-3	1.30E-5	8.65E-5	7.15E-7	-1.30E-3	1.30E-3
GWP	kg CO2-eq	1.38E-1	8.23E-3	1.21E-2	1.59E-1	1.78E-3	5.64E-2	7.20E-4	-8.42E-2	1.33E-1
ODP	kg CFC-11-eq	3.29E-9	1.53E-9	2.07E-8	2.55E-8	3.29E-10	1.15E-9	1.71E-11	-3.36E-9	2.37E-8
POCP	kg ethene-eq	1.15E-4	4.94E-6	8.73E-6	1.29E-4	1.07E-6	8.66E-6	1.64E-7	-5.53E-5	8.32E-5
AP	kg SO2-eq	4.42E-4	3.54E-5	8.32E-5	5.61E-4	7.64E-6	4.42E-5	3.77E-7	-2.07E-4	4.05E-4
EP	kg PO4 3--eq	4.25E-5	7.07E-6	1.07E-5	6.03E-5	1.53E-6	7.84E-6	1.64E-7	-2.11E-5	4.87E-5
HTP	kg 1,4-DB-eq	2.26E-2	3.52E-3	1.47E-2	4.08E-2	7.59E-4	1.76E-2	5.62E-5	-1.05E-2	4.87E-2
FAETP	kg 1,4-DB-eq	6.50E-4	1.03E-4	5.30E-4	1.28E-3	2.22E-5	4.00E-4	6.07E-5	-2.77E-4	1.49E-3
MAETP	kg 1,4-DB-eq	1.54E+0	3.68E-1	1.48E+0	3.38E+0	7.95E-2	9.08E-1	6.06E-2	-6.41E-1	3.79E+0
TETP	kg 1,4-DB-eq	1.01E-4	1.25E-5	7.68E-4	8.81E-4	2.69E-6	5.40E-5	9.24E-8	-6.75E-5	8.70E-4
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.45E-1	8.30E-3	1.43E-2	1.67E-1	1.79E-3	5.79E-2	8.43E-4	-8.43E-2	1.44E-1
GWP-f	kg CO2 eq	1.44E-1	8.30E-3	1.16E-2	1.64E-1	1.79E-3	5.66E-2	8.43E-4	-8.72E-2	1.36E-1
GWP-b	kg CO2 eq	5.31E-4	5.04E-6	2.58E-3	3.12E-3	1.09E-6	1.30E-3	7.32E-7	2.86E-3	7.28E-3
GWP-luluc	kg CO2 eq	5.84E-5	2.94E-6	1.82E-4	2.43E-4	6.34E-7	1.02E-5	1.47E-8	-3.81E-5	2.16E-4
ODP	kg CFC11 eq	3.18E-9	1.91E-9	1.16E-8	1.67E-8	4.12E-10	1.36E-9	2.12E-11	-3.54E-9	1.49E-8
AP	mol H+ eq	5.34E-4	4.73E-5	1.05E-4	6.86E-4	1.02E-5	5.71E-5	5.07E-7	-2.50E-4	5.04E-4
EP-fw	kg P eq	2.39E-6	6.83E-8	3.82E-7	2.84E-6	1.47E-8	2.94E-7	6.69E-10	-1.19E-6	1.96E-6
EP-m	kg N eq	9.06E-5	1.69E-5	1.95E-5	1.27E-4	3.65E-6	1.68E-5	3.26E-7	-4.52E-5	1.03E-4
EP-T	mol N eq	1.02E-3	1.86E-4	2.41E-4	1.45E-3	4.02E-5	1.85E-4	2.05E-6	-5.02E-4	1.17E-3
POCP	kg NMVOC eq	4.51E-4	5.33E-5	5.59E-5	5.60E-4	1.15E-5	5.83E-5	7.70E-7	-2.23E-4	4.08E-4
ADP-mm	kg Sb eq	2.32E-6	2.15E-7	8.90E-7	3.42E-6	4.63E-8	2.25E-7	5.14E-10	-5.73E-7	3.12E-6
ADP-f	MJ	4.98E+0	1.27E-1	2.93E+0	8.03E+0	2.75E-2	1.78E-1	1.55E-3	-2.69E+0	5.55E+0
WDP	m3 depriv.	1.01E-1	3.91E-4	5.11E-2	1.53E-1	8.43E-5	3.45E-3	9.00E-6	-5.01E-2	1.06E-1
PM	disease inc.	4.73E-9	7.49E-10	8.68E-10	6.35E-9	1.62E-10	9.35E-10	1.06E-11	-2.26E-9	5.20E-9
IR	kBq U-235 eq	2.77E-3	5.57E-4	3.43E-2	3.76E-2	1.20E-4	5.41E-4	7.15E-6	-1.42E-3	3.69E-2
ETP-fw	CTUe	1.23E+0	1.03E-1	9.81E-1	2.31E+0	2.23E-2	2.04E-1	1.30E-3	-5.65E-1	1.98E+0
HTP-c	CTUh	3.59E-11	3.68E-12	2.12E-11	6.08E-11	7.94E-13	2.54E-11	3.87E-14	-1.58E-11	7.12E-11
HTP-nc	CTUh	9.96E-10	1.23E-10	6.70E-10	1.79E-9	2.66E-11	3.04E-10	8.39E-13	-4.57E-10	1.66E-9
SQP	Pt	3.25E-1	1.09E-1	8.02E-1	1.24E+0	2.35E-2	1.42E-1	3.97E-3	-6.36E-1	7.70E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.02E-1	1.83E-3	4.14E-1	5.18E-1	3.94E-4	8.72E-3	5.93E-5	-1.35E-1	3.92E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.02E-1	1.83E-3	4.14E-1	5.18E-1	3.94E-4	8.72E-3	5.93E-5	-1.35E-1	3.92E-1
PENRE	MJ	5.34E+0	1.35E-1	2.94E+0	8.42E+0	2.92E-2	1.90E-1	1.64E-3	-2.90E+0	5.73E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.34E+0	1.35E-1	2.94E+0	8.42E+0	2.92E-2	1.90E-1	1.64E-3	-2.90E+0	5.73E+0
PET	MJ	5.45E+0	1.37E-1	3.35E+0	8.93E+0	2.96E-2	1.98E-1	1.70E-3	-3.04E+0	6.13E+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	1.59E-3	1.44E-5	1.64E-3	3.24E-3	3.11E-6	1.03E-4	1.90E-6	-8.01E-4	2.55E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.12E-7	3.26E-7	5.70E-8	1.09E-6	7.03E-8	2.94E-7	1.88E-9	-6.90E-7	7.70E-7
NHWD	kg	6.55E-3	7.89E-3	1.63E-3	1.61E-2	1.70E-3	8.90E-3	6.81E-3	-2.28E-3	3.12E-2
RWD	kg	2.42E-6	8.66E-7	8.53E-8	3.37E-6	1.87E-7	6.88E-7	1.01E-8	-1.30E-6	2.96E-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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