

Environmental Profile

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

Ecochain v3.5.80



Product: 3024223 - PP-R Tee Metal F/T GN 25x3/4";
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	0.38	0	0	0.39	0	0	0	-0.03	0.36
ADPE	kg Sb-eq	1.26E-3	3.58E-7	6.41E-7	1.26E-3	6.74E-8	2.10E-7	6.16E-10	-5.89E-4	6.74E-4
ADPF	kg Sb-eq	3.08E-3	1.34E-4	6.06E-5	3.27E-3	1.90E-5	6.91E-5	8.71E-7	-1.28E-3	2.09E-3
GWP	kg CO2-eq	3.12E-1	1.97E-2	1.08E-2	3.43E-1	2.59E-3	4.20E-2	5.54E-4	-1.11E-1	2.77E-1
ODP	kg CFC-11-eq	1.52E-8	3.44E-9	1.48E-8	3.34E-8	4.79E-10	9.42E-10	2.10E-11	-6.22E-9	2.86E-8
POCP	kg ethene-eq	9.10E-4	1.80E-5	7.12E-6	9.35E-4	1.55E-6	7.05E-6	1.48E-7	-1.09E-4	8.35E-4
AP	kg SO2-eq	1.75E-2	2.68E-4	6.26E-5	1.79E-2	1.11E-5	4.04E-5	4.63E-7	-1.37E-3	1.65E-2
EP	kg PO4 3--eq	9.68E-4	3.38E-5	8.47E-6	1.01E-3	2.22E-6	6.73E-6	1.56E-7	-1.25E-4	8.94E-4
HTP	kg 1,4-DB-eq	2.83E+0	9.55E-3	1.26E-2	2.85E+0	1.11E-3	1.39E-2	5.27E-5	-1.91E-1	2.68E+0
FAETP	kg 1,4-DB-eq	6.57E-2	2.19E-4	4.46E-4	6.64E-2	3.24E-5	3.45E-4	4.45E-5	-8.01E-3	5.88E-2
MAETP	kg 1,4-DB-eq	2.87E+2	8.69E-1	1.14E+0	2.89E+2	1.16E-1	7.55E-1	4.52E-2	-2.76E+1	2.63E+2
TETP	kg 1,4-DB-eq	7.78E-3	3.09E-5	5.46E-4	8.36E-3	3.92E-6	4.29E-5	9.71E-8	-5.12E-4	7.89E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.22E-1	1.99E-2	1.26E-2	3.54E-1	2.61E-3	4.22E-2	6.46E-4	-1.15E-1	2.85E-1
GWP-f	kg CO2 eq	3.21E-1	1.98E-2	1.01E-2	3.51E-1	2.61E-3	4.22E-2	6.46E-4	-1.13E-1	2.83E-1
GWP-b	kg CO2 eq	4.15E-4	4.38E-6	2.38E-3	2.80E-3	1.58E-6	-5.35E-5	5.88E-7	-1.12E-3	1.63E-3
GWP-luluc	kg CO2 eq	3.72E-4	9.86E-6	1.29E-4	5.11E-4	9.22E-7	8.40E-6	1.81E-8	-1.15E-4	4.05E-4
ODP	kg CFC11 eq	1.64E-8	4.32E-9	8.36E-9	2.91E-8	6.01E-10	1.11E-9	2.62E-11	-6.40E-9	2.44E-8
AP	mol H+ eq	2.00E-2	3.39E-4	7.91E-5	2.05E-2	1.48E-5	5.18E-5	6.18E-7	-1.65E-3	1.89E-2
EP-fw	kg P eq	1.59E-4	1.28E-7	3.03E-7	1.60E-4	2.14E-8	2.74E-7	7.86E-10	-1.33E-5	1.47E-4
EP-m	kg N eq	1.06E-3	9.06E-5	1.57E-5	1.16E-3	5.31E-6	1.44E-5	3.23E-7	-1.96E-4	9.87E-4
EP-T	mol N eq	1.54E-2	1.01E-3	1.83E-4	1.65E-2	5.85E-5	1.60E-4	2.44E-6	-2.69E-3	1.41E-2
POCP	kg NMVOC eq	4.21E-3	2.67E-4	4.42E-5	4.52E-3	1.67E-5	4.94E-5	8.37E-7	-6.89E-4	3.90E-3
ADP-mm	kg Sb eq	1.26E-3	3.58E-7	6.41E-7	1.26E-3	6.74E-8	2.10E-7	6.16E-10	-5.89E-4	6.74E-4
ADP-f	MJ	6.10E+0	2.83E-1	2.08E+0	8.47E+0	4.00E-2	1.42E-1	1.86E-3	-2.65E+0	6.00E+0
WDP	m3 depriv.	2.59E-1	6.95E-4	3.97E-2	2.99E-1	1.23E-4	2.51E-3	3.95E-5	-8.21E-2	2.20E-1
PM	disease inc.	4.68E-8	1.29E-9	7.15E-10	4.88E-8	2.35E-10	8.25E-10	1.26E-11	-6.78E-9	4.31E-8
IR	kBq U-235 eq	1.22E-2	1.23E-3	2.41E-2	3.76E-2	1.75E-4	4.54E-4	8.22E-6	-5.10E-3	3.31E-2
ETP-fw	CTUe	1.96E+2	2.12E-1	7.19E-1	1.97E+2	3.25E-2	2.01E-1	1.42E-3	-2.78E+1	1.69E+2
HTP-c	CTUh	2.85E-9	9.84E-12	1.69E-11	2.88E-9	1.16E-12	2.02E-11	3.97E-14	-6.27E-10	2.27E-9
HTP-nc	CTUh	2.29E-7	2.25E-10	5.01E-10	2.30E-7	3.87E-11	2.83E-10	9.53E-13	-3.97E-8	1.90E-7
SQP	Pt	3.10E+0	1.64E-1	5.73E-1	3.84E+0	3.42E-2	1.29E-1	4.43E-3	-6.21E-1	3.38E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.86E-1	3.24E-3	2.92E-1	9.80E-1	5.74E-4	8.22E-3	4.92E-5	-1.91E-1	7.98E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.86E-1	3.24E-3	2.92E-1	9.80E-1	5.74E-4	8.22E-3	4.92E-5	-1.91E-1	7.98E-1
PENRE	MJ	6.53E+0	3.00E-1	2.09E+0	8.92E+0	4.25E-2	1.52E-1	1.97E-3	-2.85E+0	6.27E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.53E+0	3.00E-1	2.09E+0	8.92E+0	4.25E-2	1.52E-1	1.97E-3	-2.85E+0	6.27E+0
PET	MJ	7.22E+0	3.04E-1	2.38E+0	9.90E+0	4.30E-2	1.60E-1	2.02E-3	-3.04E+0	7.07E+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	6.06E-3	2.54E-5	1.24E-3	7.33E-3	4.53E-6	7.74E-5	2.17E-6	-1.83E-3	5.58E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.58E-4	5.46E-7	7.86E-8	1.58E-4	1.02E-7	2.51E-7	2.46E-9	-7.44E-5	8.42E-5
NHWD	kg	7.87E-2	1.11E-2	2.21E-3	9.20E-2	2.48E-3	6.89E-3	9.90E-3	-2.70E-2	8.43E-2
RWD	kg	1.03E-5	1.94E-6	1.18E-7	1.24E-5	2.72E-7	5.73E-7	1.22E-8	-4.15E-6	9.08E-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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