

Environmental Profile

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

Ecochain v3.5.80



Product: 3021205 - PVC KGFix Bend 30° GY 315 SN4 S/SP
Unit: 1 piece
Manufacturer: Wavin - NL - Hardenberg - Verified
Address: J.C. Kellerlaan 3
7772 SG Hardenberg
Netherlands

LCA standard: NMD Bepalingsmethode 1.1 (2022)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
Verifier: Martijn van Hövell - SGS Search



The Wavin KG sewer pipes and fittings are suitable for drain and underground sewer applications. This easy push-fit rubber ring jointing system is durable, corrosion free and light weight.

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 - NL - Hardenberg - 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											

Results

Environmental impact SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	1.09	0.02	0.06	1.16	0.01	0.34	0	-0.51	1.01
ADPE	kg Sb-eq	8.77E-3	3.19E-6	1.37E-5	8.79E-3	2.88E-6	2.59E-5	3.31E-8	-1.07E-4	8.71E-3
ADPF	kg Sb-eq	1.11E-1	9.17E-4	2.35E-3	1.15E-1	8.11E-4	8.89E-3	4.58E-5	-5.78E-2	6.65E-2
GWP	kg CO2-eq	9.47E+0	1.25E-1	4.47E-1	1.00E+1	1.10E-1	3.66E+0	3.18E-2	-5.04E+0	8.80E+0
ODP	kg CFC-11-eq	4.84E-6	2.21E-8	3.53E-8	4.90E-6	2.05E-8	3.71E-7	1.09E-9	-2.41E-6	2.88E-6
POCP	kg ethene-eq	5.77E-3	7.52E-5	1.94E-4	6.04E-3	6.63E-5	7.09E-4	8.19E-6	-2.56E-3	4.26E-3
AP	kg SO2-eq	4.08E-2	5.48E-4	1.92E-3	4.32E-2	4.75E-4	5.25E-3	2.47E-5	-1.69E-2	3.21E-2
EP	kg PO4 3--eq	5.48E-3	1.08E-4	2.47E-4	5.84E-3	9.49E-5	8.11E-4	1.08E-5	-2.37E-3	4.38E-3
HTP	kg 1,4-DB-eq	3.77E+0	5.25E-2	2.07E-1	4.03E+0	4.72E-2	1.35E+0	2.59E-3	-1.60E+0	3.83E+0
FAETP	kg 1,4-DB-eq	1.84E-1	1.53E-3	7.09E-3	1.93E-1	1.38E-3	2.06E-2	7.94E-4	-4.79E-2	1.67E-1
MAETP	kg 1,4-DB-eq	2.69E+2	5.51E+0	2.79E+1	3.02E+2	4.94E+0	7.17E+1	9.69E-1	-1.03E+2	2.77E+2
TETP	kg 1,4-DB-eq	4.27E-2	1.86E-4	1.54E-2	5.83E-2	1.67E-4	4.81E-3	8.74E-6	-1.60E-2	4.73E-2
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.21E+0	1.26E-1	5.11E-1	9.85E+0	1.11E-1	4.22E+0	3.71E-2	-4.60E+0	9.62E+0
GWP-f	kg CO2 eq	9.67E+0	1.26E-1	3.93E-1	1.02E+1	1.11E-1	3.68E+0	3.71E-2	-5.15E+0	8.87E+0
GWP-b	kg CO2 eq	-4.75E-1	5.80E-5	8.11E-2	-3.93E-1	6.76E-5	5.38E-1	4.62E-5	5.52E-1	6.97E-1
GWP-luluc	kg CO2 eq	1.97E-2	4.61E-5	3.73E-2	5.71E-2	3.94E-5	1.37E-3	9.55E-7	-7.07E-3	5.14E-2
ODP	kg CFC11 eq	4.81E-6	2.77E-8	4.15E-8	4.88E-6	2.56E-8	3.82E-7	1.36E-9	-2.39E-6	2.89E-6
AP	mol H+ eq	4.95E-2	7.29E-4	2.39E-3	5.26E-2	6.34E-4	6.60E-3	3.30E-5	-2.05E-2	3.94E-2
EP-fw	kg P eq	5.29E-4	1.27E-6	6.88E-6	5.37E-4	9.16E-7	4.61E-5	4.32E-8	-2.22E-4	3.62E-4
EP-m	kg N eq	8.85E-3	2.57E-4	5.66E-4	9.67E-3	2.27E-4	1.64E-3	2.29E-5	-3.72E-3	7.84E-3
EP-T	mol N eq	9.42E-2	2.83E-3	6.24E-3	1.03E-1	2.50E-3	1.80E-2	1.32E-4	-4.01E-2	8.38E-2
POCP	kg NMVOC eq	2.99E-2	8.09E-4	1.77E-3	3.25E-2	7.15E-4	5.37E-3	4.55E-5	-1.32E-2	2.54E-2
ADP-mm	kg Sb eq	8.77E-3	3.19E-6	1.37E-5	8.79E-3	2.88E-6	2.59E-5	3.31E-8	-1.07E-4	8.71E-3
ADP-f	MJ	2.35E+2	1.90E+0	4.39E+0	2.41E+2	1.71E+0	1.76E+1	9.91E-2	-1.21E+2	1.39E+2
WDP	m3 depriv.	1.50E+1	6.78E-3	3.40E+0	1.84E+1	5.24E-3	6.97E-1	6.32E-4	-7.51E+0	1.16E+1
PM	disease inc.	3.67E-7	1.13E-8	2.96E-8	4.08E-7	1.00E-8	8.11E-8	6.82E-10	-1.67E-7	3.33E-7
IR	kBq U-235 eq	5.55E-1	7.94E-3	6.98E-3	5.70E-1	7.47E-3	6.24E-2	4.57E-4	-2.54E-1	3.87E-1
ETP-fw	CTUe	2.52E+2	1.69E+0	1.02E+1	2.64E+2	1.39E+0	1.36E+2	1.50E+0	-1.09E+2	2.94E+2
HTP-c	CTUh	7.65E-9	5.48E-11	3.53E-10	8.06E-9	4.94E-11	1.96E-9	2.73E-12	-2.80E-9	7.26E-9
HTP-nc	CTUh	2.50E-7	1.85E-9	1.10E-8	2.63E-7	1.65E-9	4.74E-8	2.91E-10	-9.65E-8	2.16E-7
SQP	Pt	6.25E+1	1.64E+0	3.28E-1	6.45E+1	1.46E+0	1.07E+1	2.54E-1	-1.17E+2	-3.98E+1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.89E+1	2.37E-2	2.13E+1	4.03E+1	2.45E-2	1.26E+0	3.75E-3	-2.38E+1	1.77E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.89E+1	2.37E-2	2.13E+1	4.03E+1	2.45E-2	1.26E+0	3.75E-3	-2.38E+1	1.77E+1
PENRE	MJ	2.51E+2	2.01E+0	4.75E+0	2.58E+2	1.81E+0	1.87E+1	1.05E-1	-1.31E+2	1.48E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.51E+2	2.01E+0	4.75E+0	2.58E+2	1.81E+0	1.87E+1	1.05E-1	-1.31E+2	1.48E+2
PET	MJ	2.70E+2	2.04E+0	2.61E+1	2.98E+2	1.84E+0	2.00E+1	1.09E-1	-1.55E+2	1.66E+2
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	1.87E-1	2.31E-4	8.03E-2	2.67E-1	1.93E-4	1.97E-2	1.22E-4	-9.18E-2	1.96E-1
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.24E-3	4.80E-6	4.66E-6	1.25E-3	4.37E-6	2.93E-5	1.21E-7	-1.05E-4	1.18E-3
NHWD	kg	9.79E-1	1.20E-1	7.20E-3	1.11E+0	1.06E-1	6.47E-1	4.35E-1	-4.03E-1	1.89E+0
RWD	kg	5.12E-4	1.25E-5	8.64E-6	5.33E-4	1.16E-5	6.71E-5	6.45E-7	-2.28E-4	3.84E-4
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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