

Environmental Profile

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

Ecochain v3.5.64



Product: 4022002 - PP-INSP.CHAMP. TP 4 110X315
Unit: 1 piece
Manufacturer: Wavin - DK - Hammel - handmade

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 20-06-2022
End of validity: 20-06-2027
Verifier: Harry van Ewijk - SGS Search



This LCA was evaluated according to EN15804+A2 and the NMD Bepalingsmethode 1.1. It was concluded that the LCA complies with these standards.

Plastic inspection chamber made of polypropylene according to DIN EN 13598-2.

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - DK - Hammel - handmade (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	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 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF 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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	Total
GWP-total	kg CO2 eq	8.69E+0	1.67E-2	7.58E-2	8.78E+0	8.78E+0
GWP-f	kg CO2 eq	8.70E+0	1.67E-2	5.50E-2	8.77E+0	8.77E+0
GWP-b	kg CO2 eq	-8.98E-3	7.72E-6	2.08E-2	1.19E-2	1.19E-2
GWP-luluc	kg CO2 eq	4.10E-3	6.12E-6	2.82E-5	4.13E-3	4.13E-3
ODP	kg CFC11 eq	5.50E-7	3.69E-9	6.64E-9	5.60E-7	5.60E-7
AP	mol H+ eq	3.70E-2	9.69E-5	4.40E-4	3.75E-2	3.75E-2
EP-fw	kg P eq	1.90E-4	1.69E-7	2.34E-6	1.92E-4	1.92E-4
EP-m	kg N eq	6.69E-3	3.42E-5	1.53E-4	6.87E-3	6.87E-3
EP-T	mol N eq	7.52E-2	3.77E-4	1.43E-3	7.70E-2	7.70E-2
POCP	kg NMVOC eq	3.15E-2	1.08E-4	4.11E-4	3.21E-2	3.21E-2
ADP-mm	kg Sb eq	5.11E-4	4.23E-7	2.44E-6	5.14E-4	5.14E-4
ADP-f	MJ	2.67E+2	2.52E-1	5.97E-1	2.68E+2	2.68E+2
WDP	m3 depriv.	5.26E+0	9.02E-4	1.54E-2	5.27E+0	5.27E+0
PM	disease inc.	3.53E-7	1.50E-9	8.05E-9	3.62E-7	3.62E-7
IR	kBq U-235 eq	2.84E-1	1.06E-3	1.79E-3	2.87E-1	2.87E-1
ETP-fw	CTUe	9.29E+1	2.25E-1	2.24E+0	9.54E+1	9.54E+1
HTP-c	CTUh	3.01E-9	7.29E-12	1.04E-10	3.12E-9	3.12E-9
HTP-nc	CTUh	8.21E-8	2.46E-10	2.36E-9	8.47E-8	8.47E-8
SQP	Pt	2.76E+1	2.19E-1	4.10E-1	2.82E+1	2.82E+1
Resource use	Unit	A1	A2	A3	A1-A3	Total
PERE	MJ	2.55E+1	3.16E-3	2.69E+0	2.82E+1	2.82E+1
PERM	MJ	0	0	0	0	0
PERT	MJ	2.55E+1	3.16E-3	2.69E+0	2.82E+1	2.82E+1
PENRE	MJ	2.86E+2	2.68E-1	6.35E-1	2.87E+2	2.87E+2
PENRM	MJ	0	0	0	0	0
PENRT	MJ	2.86E+2	2.68E-1	6.35E-1	2.87E+2	2.87E+2
PET	MJ	3.11E+2	2.71E-1	3.33E+0	3.15E+2	3.15E+2
SM	kg	0	0	0	0	0
RSF	MJ	0	0	0	0	0
NRSF	MJ	0	0	0	0	0
FW	m3	9.65E-2	3.07E-5	4.10E-4	9.69E-2	9.69E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	Total
HWD	kg	8.84E-5	6.39E-7	1.18E-6	9.02E-5	9.02E-5
NHWD	kg	9.19E-1	1.60E-2	8.97E-3	9.44E-1	9.44E-1
RWD	kg	3.10E-4	1.66E-6	2.57E-6	3.15E-4	3.15E-4
CRU	kg	0	0	0	0	0
MFR	kg	0	0	0	0	0
MER	kg	0	0	0	0	0
EE	MJ	0	0	0	0	0
EET	MJ	0	0	0	0	0
EEE	MJ	0	0	0	0	0



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