Environmental Profile

This LCA is calculated according to: ISO 14044, ISO 14040

Ecochain v4.3.1

chemical solutions to concrete problems

Product:	Duro-Nox
Unit:	1 kg
Manufacturer:	Nox-Crete

Liquid floor hardener, densifier, and sealer

LCA standard:	ISO 14040 & 14044
Standard database:	Worldwide - Ecoinvent v 3.9.1 Cut-O No
Externally verified:	08-08-2025
Export date:	

The LCA background information and project dossier have been registered in the online Ecochain application in the account Nox-Crete (2023). (☑ = 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

Product stage

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
C4 Disposal

Benefits and loads beyond the system boundaries

D Reuse- Recovery- Recycling- potential

Environmental impacts and parameters

GWP-total = EF 31 EN15804+A2 Climate Change_corrected [kg CO2 eq]; **GWP-f** = EF 31 Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF 31 EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF 31 EN15804+A2 Climate Change - Land use and LU change [kg CO2 eq]; **GWP-GHG** = IPCC Climate change (total) [kg CO2-eq]; **ODP** = EF 31 Ozone depletion [kg CFC11 eq]; **AP** = EF 31 Acidification [mol H+ eq]; **EP-fw** = EF 31 Eutrophication, freshwater [kg P eq]; **EP-m** = EF 31 Eutrophication, marine [kg N eq]; **EP-T** = EF 31 Eutrophication, terrestrial [mol N eq]; **POCP** = EF 31 Photochemical ozone formation [kg NMVOC eq]; **ADP-mm** = EF 31 Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF 31 Resource use, fossils [MJ]; **WDP** = EF 31 Water use [m3 depriv.]; **PM** = EF 31 Particulate matter [disease inc.]; **IR** = EF 31 Ionising radiation [kBq U-235 eq]; **ETP-fw** = EF 31 Ecotoxicity, freshwater [CTUe]; **HTP-c** = EF 31 Human toxicity, cancer [CTUh]; **HTP-nc** = EF 31 Human toxicity, non-cancer [CTUh]; **SQP** = EF 31 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]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

Statement of Confidentiality

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	A4	Total
GWP-total	kg CO2 eq	4.815E+0	6.844E-2	6.018E-2	4.944E+0	0.285	5.229E+0
GWP-f	kg CO2 eq	4.880E+0	6.838E-2	5.983E-2	5.009E+0	2.150E-1	5.223E+0
GWP-b	kg CO2 eq	-6.997E-2	2.689E-5	1.604E-4	-0.07	0.07	0
GWP-luluc	kg CO2 eq	4.768E-3	3.566E-5	1.950E-4	4.999E-3	1.051E-4	5.104E-3
GWP-GHG	kg CO2-eq	4.882E+0	6.843E-2	6.006E-2	5.010E+0	2.151E-1	5.225E+0
ODP	kg CFC11 eq	1.118E-6	1.058E-9	1.108E-9	1.120E-6	3.383E-9	1.123E-6
AP	mol H+ eq	1.715E-2	3.259E-4	2.766E-4	1.776E-2	1.289E-3	1.904E-2
EP-fw	kg P eq	1.516E-4	6.585E-7	9.540E-7	1.532E-4	2.008E-6	1.553E-4
EP-m	kg N eq	3.331E-3	1.219E-4	1.007E-4	3.554E-3	5.244E-4	4.078E-3
EP-T	mol N eq	3.810E-2	1.319E-3	1.075E-3	4.049E-2	5.687E-3	4.618E-2
POCP	kg NMVOC eq	2.013E-2	4.487E-4	3.689E-4	2.095E-2	1.829E-3	2.278E-2
ADP-mm	kg Sb eq	2.943E-5	2.129E-7	1.790E-7	2.982E-5	5.761E-7	3.040E-5
ADP-f	MJ	8.924E+1	9.768E-1	8.786E-1	9.110E+1	3.150E+0	9.425E+1
WDP	m3 depriv.	3.251E+0	4.623E-3	2.861E-2	3.284E+0	1.601E-2	3.300E+0
PM	disease inc.	2.026E-7	6.576E-9	5.405E-9	2.145E-7	2.675E-8	2.413E-7
IR	kBq U-235 eq	1.028E-1	3.619E-4	1.228E-3	1.043E-1	1.175E-3	1.055E-1
ETP-fw	CTUe	3.216E+1	5.390E-1	6.106E-1	3.331E+1	1.698E+0	3.500E+1
HTP-c	CTUh	1.727E-9	3.591E-11	3.003E-11	1.793E-9	1.301E-10	1.924E-9
HTP-nc	CTUh	4.120E-8	7.627E-10	6.572E-10	4.262E-8	2.705E-9	4.532E-8
SQP	Pt	2.163E+1	7.318E-1	6.242E-1	2.299E+1	3.143E+0	2.613E+1
Resource use	Unit	A1	A2	A3	A1-A3	A4	Total
PERE	MJ	5.694E+0	1.284E-2	2.219E-2	5.729E+0	3.934E-2	5.769E+0
PERM	MJ	0	0	0	0	0	0
PERT	MJ	5.694E+0	1.284E-2	2.219E-2	5.729E+0	3.934E-2	5.769E+0
PENRE	MJ	9.573E+1	1.038E+0	9.353E-1	9.770E+1	3.349E+0	1.011E+2
PENRM	MJ	0	0	0	0	0	0
PENRT	MJ	9.573E+1	1.038E+0	9.353E-1	9.770E+1	3.349E+0	1.011E+2
PET	MJ	3.915E+0	1.051E+0	9.575E-1	5.924E+0	3.388E+0	9.312E+0
SM	kg	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0
FW	m3	7.698E-2	1.266E-4	7.432E-4	7.785E-2	4.339E-4	7.829E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	A4	Total
HWD	kg	1.392E-3	6.224E-6	5.128E-6	1.403E-3	1.982E-5	1.423E-3
NHWD	kg	3.367E-1	6.112E-2	5.120E-2	4.491E-1	2.698E-1	7.188E-1
RWD	kg	6.831E-5	2.085E-7	6.983E-7	6.922E-5	6.804E-7	6.990E-5
CRU	kg	0	0	0	0	0	0
MFR	kg	0	0	1.148E-3	1.148E-3	0	1.148E-3
MER	kg	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0

LCA Program

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