

Environmental Product Declaration



In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021:

ARSTYL® LS2

from

NMC



Programme:
Programme operator:
EPD registration number:
Publication date:
Valid until:

The International EPD® System, www.environdec.com
EPD International AB
EPD-IES-0022491
2025-05-09
2030-05-08

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

Accountabilities for PCR, LCA and independent, third-party verification

Product Category Rules (PCR)

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR): PRODUCT CATEGORY RULES PCR 2019:14 VERSION 1.3.4 CONSTRUCTION PRODUCTS; EN 16783:2024 Thermal insulation products C-PCR-005 (TO PCR 2024:14)

PCR review was conducted by: The Technical Committee of the International EPD® System. The review panel may be contacted via info@environdec.com. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact

Life Cycle Assessment (LCA)

LCA accountability: Alain Baltus
NMC sa
Gert-Noël-Strasse 4731 Eynatten Belgium www.nmc.eu



Third-party verification

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

☒ EPD verification by individual verifier

Third-party individual verifier: Matthew Fishwick, Fishwick Environmental Ltd

Approved by: The International EPD® System

Procedure for follow-up of data during EPD validity involves third party verifier:

☐ Yes ☒ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD:

NMC sa

Contact :

NMC sa
Gert-Noël-Strasse
4731 Eynatten
Belgium
info@nmc.eu

Description of the organisation:

NMC is a leading, growth-oriented international company specializing in synthetic foams. For more than 70 years, the company has put customers and people at the heart of its actions, identifying more and more products and solutions that contribute to comfort and protection for a better life. Some 1,650 employees at 22 sites currently serve customers in 120 countries. NMC is active in the following sectors: solutions for industries, technical insulation, protective packaging, decorative design elements, underlays for floating floors and sport and leisure.

Product-related or management system-related certifications:

The production site is certified ISO 9001:2015 and ISO 14001:2015 certified.

Name and location of production site(s):

NMC sa
Gert-Noël-Strasse
B-4731 Eynatten

EPD Type

This EPD is a single product EPD.

Product information

Product name:

ARSTYL® LS2

Product description:

ARSTYL® LS2 is a multi-functional profile for window embrasures made in polyurethane foam. It is perfect in combination with plasterboards. The advantages of this product are clean edges and finishing touches in no time, no tearing of the edges, and tapered material thickness to the edge. ARSTYL® LS2 is pre-painted, ready for the final coat of paint.

UN CPC code:

369 (3695)

Geographical scope:

The raw materials are sourced in Europe, the product is manufactured in Belgium and marketed, used and disposed of in Europe, but mainly in Northern Europe.

LCA information

Functional Unit:

1 meter (305 kg/m³, 1046 gr/m, height 55mm, width 300mm) of ARSTYL® LS2 made of polyurethane foam (used as multi-functional profiles for window embrasures)

Reference service life:

50 years

Database(s) and LCA software used:

The LCA and results were calculated using LCA for Expert 10.9 and its content version 2024. Some of the data used comes from the ECOINVENT 3.10 database in the cut-off version.

Description of system boundaries:

Cradle to grave and module D, covering modules A1 to A5, B, C and module D.

Geographical and temporal representativeness of primary data

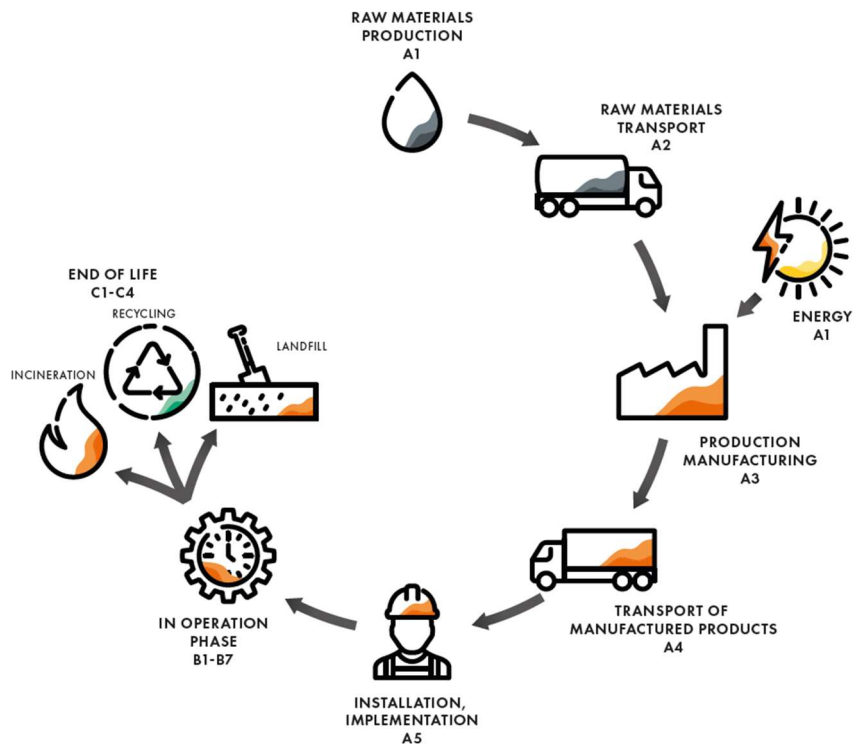
The primary data collected relating to the manufacture of the product studied are representative of production in 2024 for the NMC Belgium site. The electricity mix used in the model is a specific process based on the Belgian grid mix, but adapted to the only green electricity produced, since NMC Belgium buys its electricity with a certificate of origin guaranteeing that it is produced entirely from renewable energy sources. This process has a GWP impact of 0.0167 kg CO₂e/kWh (59,5% nuclear, 2,3% hydro, 8,8% photovoltaic, 5,7% biomass, 1,8% biogas and 22% Wind power).

Cut-off Criteria for the Exclusion of Inputs and Outputs:

In compliance with the rules in EN 15804:2012+A2:2019, 6.3.6, the cut-off criteria are 1% of renewable and non-renewable primary energy usage and 1% of the total mass input of a unit process. All known inputs and outputs were included. Data gaps were filled with conservative assumptions and generic data. The neglected input flows are each below 1% of the total mass or the total impact of primary energy. In total, they constitute less than 5% of the overall mass or 5% of the total energy.

Workshop cleaning, the administrative department, employee transport, manufacturing and heavy maintenance of production equipment have been omitted from the boundaries of the system in accordance with standard EN 15804.

System diagram:



- Production stage, A1- A3:

This stage considers the extraction, production and transport of raw materials, the production of energy consumed on site, the manufacture of ARSTYL® LS2, its packaging and storage prior to shipment and delivery. The treatment of waste leaving the plant is a mix of recycling and incineration.

- A1 Raw materials supply

This module takes into account the supply and processing of raw materials and the energies generated upstream of the manufacturing process.

- A2 Transport to manufacturing site

This module takes into account road transport. Vehicles used in the modelling: Euro 0-6 diesel mix freight truck with a loading capacity of 27 tons. The truck loading rate for raw materials has been estimated at 50%.

- A3 Production

ARSTYL® LS2 is manufactured by injecting the various components into a mold prepared with PE film. A waiting period is required for the components to react before the parts are removed from the mold. The product is then stored for cooling before passing into the paint booth, the final stage being packaging in cardboard boxes.

- A4 transport

This step models the transport of ARSTYL® LS2 from the production site to the building site.

Scenario information	Value	Unit
Vehicle type	Truck-trailer, Euro 0 - 6 mix POCP adapted	n/a
Fuel type	Diesel	n/a
Distance	1544	km
Fill rate mass payload capacity	20	%
Gross vehicle weight	34 - 40t gross weight / 27t payload capacity	t

- A5 Installation

ARSTYL® LS2 is installed by hand and requires no special tools apart from a manual mitre saw, a screwdriver, screws and, if necessary, glue. Auxiliary inputs have not been included in the lifecycle analysis because they are below the cut-off limit. In addition, as each end-user works differently, it has been decided that it is up to the end-user to calculate the environmental impact of these complementary products for the application, as this is customer-specific data. Packaging cardboard brought to the site are estimated sent to a recycling centre (83%) for a part and the rest is landfilled (17%). (Based on data on paper and cardboard recycling in Europe according to Eurostat statistics year 2022, latest data available)

Scenario information	Value	Unit
Auxiliary inputs for installation	Excluded as below cut-off criteria	kg
Water use	Not concerned	m ³
Use of other resources	Not concerned	kg
Quantitative description of energy type (regional mix) and consumption during installation process	Not concerned	kWh or MJ
Material waste on construction site prior to treatment of waste generated by product installation (specified by type)	The 2% loss criterion has been adopted as recommended in EN 16783, which is equivalent to 0,0209 kg per m of ARSTYL® LS2 placed.	kg
Outgoing materials (specified by type) generated by waste processing on the construction site, e.g. collection for recycling, energy recovery, disposal (specified by route)	Construction site waste is considered sent to landfill.	kg
Direct emissions into ambient air, soil and water	Not concerned	kg

- Life stage in use, B1-B7

Once installed, ARSTYL® LS2 requires no maintenance or repair. It is dismantled at the end of the building's life or removed when no longer required. In addition, the product undergoes no modification or degradation throughout its entire life cycle. For these reasons, there is no impact on modules B1 to B7.

- End-of-life stage, C1-C4

- C1 Deconstruction, demolition

As with product installation, disassembly is manual and requires no special equipment other than a screwdriver. Consequently, there is no impact associated with this module.

- C2 Transport

The choice of transport for the end-of-life stage was that of truck with a Euro 0-6 diesel mix engine and a loading capacity of 27 tons. Diesel consumption of 38 liters per 100 km. The average distance between the dismantling site and the treatment center (incinerator and landfill) was estimated at 50 km.

- C3 Treatment of waste for reuse, recovery and/or recycling and C4 disposal.

ARSTYL® LS2 end of life has been modelled and based on a study of the treatment of plastic waste from the construction industry in Europe by Plasticseurope.org. The ratio used according to this study for Polyurethane plastics is 71% disposed of in an incinerator with energy recovery, and 29% landfilled as non-hazardous waste.

Scenario information	Value and Unit
Collecting process	Manual disassembly
Type-specified recovery system	0,741 kg foam for energy recovery
Disposal specified by type	0,305 kg for final disposal (Landfill)
Scenario assumptions	Transport over 50 km

- Module D

A benefit beyond the boundaries of the system is the recovery of energy generated from the incineration of waste at end-of-life. In the LCA end-of-life calculation, there is no gain for landfill; the gains in energy recovered during incineration and the avoidance of the use of new materials during recycling have been taken into account by the Sphera software and are accounted for in module D.

More information:

Name and contact information of LCA practitioner: Alain Baltus NMC sa Gert-Noël-Strasse B-4731 Eynatten info@nmc.eu

ARSTYL® LS2 is manufactured at NMC's Belgian site. For the LCA calculation, all elementary input processes as well as all energy and water inputs and waste outputs were considered. This EPD only includes environmental impacts linked to the product itself, such as material losses and packaging disposal.

Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	EU	EU	BE	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU
Specific data used	12,9%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: X = Modules declared, ND = Modules not declared

Content declaration: for 1 Functional Unit (1 meter of product)

Product components	Weight (kg per functional unit)	Post-consumer material, weight-% (% per functional unit)	Biogenic material, weight-% and kg C/ per functional unit
Polyurethane	0,93	0	0
LDPE film	0,04	0	0
Paint	0,07	0	0
TOTAL	1,05	0	0
Packaging materials	Weight (kg per functional unit)	Weight-% (versus the product)	Weight biogenic carbon, (kg C per functional unit)
Cardboard	0,136	13,0	0,055
LDPE foam	0,012	1,1	0
TOTAL	0,148	14,1	0,055

In accordance with Article 33(1) of Regulation (EC) No 1907/2006, suppliers of articles containing SVHCs published in the official ECHA Candidate List in concentrations above 0.1% w/w must provide their customers with sufficient information to allow safe use of the article, including at least the name of the substance.

The articles listed in Annex I of this communication do not contain Candidate List substances (latest update 07.11.2024) in concentrations above 0.1% w/w and are therefore not subject to proactive notification. Hence, we do not make a communication under Article 33 of the REACH Regulation. Therefore, we are not required to notify any articles in the ECHA SCIP database. Furthermore, based on current information from our upstream suppliers, we hereby declare that the references provided do not contain any substances listed in Annex XIV, i.e. substances subject to authorization, and that we comply with the restrictions under Annex XVII of the REACH Regulation.

Annex I: ARSTYL®

Results of the environmental performance indicators

Mandatory impact category indicators according to EN 15804

For the characterization factors (CF) to be used, EN 15804 refers to the “EN 15804 reference package” available at the JRC webpage. In February 2023, this reference package was updated to be based on the EF 3.1 package for CFs to be used in the PEF framework. For this EPD, the EN 15804 reference package based on EF 3.1 is being used.

Results per Functional Unit 1-meter ARSTYL® LS2										
Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
GWP-fossil	kg CO ₂ eq.	4,68E+00	9,54E-03	8,31E-02	0,00E+00	0,00E+00	8,22E-03	1,63E+00	8,98E-03	-5,88E-01
GWP-biogenic	kg CO ₂ eq.	-1,95E-02	-2,39E-04	1,96E-02	0,00E+00	0,00E+00	-2,05E-04	3,57E-04	-2,47E-05	-2,57E-03
GWP-luluc	kg CO ₂ eq.	3,28E-03	1,56E-04	6,38E-06	0,00E+00	0,00E+00	1,34E-04	5,02E-06	3,31E-05	-5,37E-05
GWP-total	kg CO ₂ eq.	4,66E+00	9,46E-03	1,03E-01	0,00E+00	0,00E+00	8,14E-03	1,63E+00	8,99E-03	-5,90E-01
ODP	kg CFC 11 eq.	4,40E-09	1,37E-15	2,04E-14	0,00E+00	0,00E+00	1,18E-15	1,46E-13	2,96E-14	-5,33E-12
AP	mol H ⁺ eq.	7,31E-03	1,22E-05	1,83E-05	0,00E+00	0,00E+00	1,05E-05	9,65E-04	5,37E-05	-6,23E-04
EP-freshwater	kg P eq.	5,63E-04	3,96E-08	1,88E-07	0,00E+00	0,00E+00	3,41E-08	3,62E-08	5,15E-06	-9,93E-07
EP-marine	kg N eq.	2,21E-03	4,48E-06	7,69E-06	0,00E+00	0,00E+00	3,86E-06	4,68E-04	1,16E-05	-1,89E-04
EP-terrestrial	mol N eq.	2,28E-02	5,22E-05	7,68E-05	0,00E+00	0,00E+00	4,50E-05	5,39E-03	1,27E-04	-2,03E-03
POCP	kg NMVOC eq.	9,70E-03	1,24E-05	2,56E-05	0,00E+00	0,00E+00	1,06E-05	1,20E-03	3,70E-05	-5,35E-04
ADP-minerals&metals*	kg Sb eq.	1,84E-06	8,09E-10	2,45E-10	0,00E+00	0,00E+00	6,97E-10	1,64E-09	5,97E-10	-5,17E-08
ADP-fossil*	MJ	1,10E+02	1,22E-01	5,92E-02	0,00E+00	0,00E+00	1,05E-01	4,25E-01	1,52E-01	-1,05E+01
WDP*	m ³	4,56E-01	1,44E-04	7,86E-03	0,00E+00	0,00E+00	1,24E-04	1,61E-01	1,16E-03	-6,52E-02
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption									

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

** Disclaimer 1: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Disclaimer 2: It is recommended to always use the results of the modules, taking into consideration module C.

Additional mandatory and voluntary impact category indicators

Results per Functional Unit 1-meter ARSTYL® LS2

Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
GWP-GHG ¹	kg CO ₂ eq.	4,68E+00	9,69E-03	8,31E-02	0,00E+00	0,00E+00	8,35E-03	1,63E+00	9,01E-03	-5,88E-01

Resource use indicators

Results per Functional Unit 1-meter ARSTYL® LS2

Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
PERE	MJ	2,34E+01	1,05E-02	2,18E+00	0,00E+00	0,00E+00	9,07E-03	8,89E-02	2,29E-02	-3,57E+00
PERM	MJ	2,16E+00	0,00E+00	-2,16E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,56E+01	1,05E-02	1,19E-02	0,00E+00	0,00E+00	9,07E-03	8,89E-02	2,29E-02	-3,57E+00
PENRE	MJ	7,78E+01	1,22E-01	4,05E+00	0,00E+00	0,00E+00	1,05E-01	2,91E+01	1,52E-01	-1,05E+01
PENRM	MJ	3,27E+01	0,00E+00	-3,99E+00	0,00E+00	0,00E+00	0,00E+00	-2,87E+01	0,00E+00	0,00E+00
PENRT	MJ	1,10E+02	1,22E-01	5,92E-02	0,00E+00	0,00E+00	1,05E-01	4,25E-01	1,52E-01	-1,05E+01
SM	kg	1,33E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	3,12E-02	1,17E-05	1,88E-04	0,00E+00	0,00E+00	1,01E-05	3,78E-03	3,47E-05	-2,74E-03

Acronyms PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

The option for separating primary energy use into energy used as a raw material and energy used as an energy carrier is option A of PCR 2019:14.

¹ This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.

Waste indicators

Results per Functional Unit 1-meter ARSTYL® LS2										
Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	8,17E-03	4,68E-12	2,45E-11	0,00E+00	0,00E+00	4,03E-12	1,89E-10	3,75E-11	-7,21E-09
Non-hazardous waste disposed	kg	3,15E-01	2,00E-05	2,43E-02	0,00E+00	0,00E+00	1,72E-05	8,23E-03	3,04E-01	-5,51E-03
Radioactive waste disposed	kg	5,29E-03	2,23E-07	1,49E-06	0,00E+00	0,00E+00	1,92E-07	1,64E-05	2,14E-06	-7,88E-04

Output flow indicators

Results per Functional Unit 1-meter ARSTYL® LS2										
Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	0,00E+00	0,00E+00	1,33E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,41E-01	0,00E+00	0,00E+00
Exported energy, electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,83E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,05E+00	0,00E+00	0,00E+00

Additional environmental impact indicators

Results per Functional Unit 1-meter ARSTYL® LS2										
Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Particulate matter	Diseases incidences	6,92E-08	1,21E-10	2,03E-10	0,00E+00	0,00E+00	1,04E-10	2,68E-09	5,56E-10	-5,11E-09
Ionising radiation, human health	kBq U235 eq.	4,35E-01	3,23E-05	2,08E-04	0,00E+00	0,00E+00	2,78E-05	2,57E-03	2,93E-04	-1,30E-01
Ecotoxicity, freshwater	CTUe	5,05E+01	9,08E-02	4,11E-02	0,00E+00	0,00E+00	7,82E-02	1,29E-01	3,29E-01	-1,51E+00
Human toxicity, cancer	CTUh	1,53E-09	1,83E-12	1,58E-12	0,00E+00	0,00E+00	1,58E-12	1,13E-11	4,87E-12	-1,21E-10

Human toxicity, non-cancer	CTUh	5,04E-08	8,23E-11	1,40E-10	0,00E+00	0,00E+00	7,09E-11	1,69E-10	1,02E-10	-2,82E-09
Land Use	-	1,97E+01	6,02E-02	1,16E-02	0,00E+00	0,00E+00	5,18E-02	9,43E-02	2,58E-02	-2,08E+00

Disclaimer 1 – for the indicator “Potential Human exposure efficiency relative to U235”. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure, or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, “potential comparative toxic unit for ecosystems”, “potential comparative toxic unit for humans – cancerogenic”, “Potential comparative toxic unit for humans - not cancerogenic”, “potential soil quality index”. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experience with the indicator.

Additional environmental information

ARSTYL® LS2 product has a low density, which means it requires few raw materials to manufacture.

NMC Belgium are certified ISO 9001 and ISO 14001.

NMC has defined its sustainability strategy, keeping a foothold in the present and looking to the future. NMC has thus formalized a new set of guidelines that forms its group-wide sustainability strategy, embedded in the global business strategy. Sustainability goals have therefore been set for 2030, with three focus areas being circularity, decarbonisation, and empowerment.

<https://nmc.eu/en/downloads/corporate-identity>

NMC Belgium is certified according to the system ISCC PLUS and POLYCERT demonstrating the company's commitment to reducing its impact on the environment and using more circular raw materials.

To continue to reduce the environmental impact of the ARSTYL® LS2 we need to continue to increase our energy efficiency and the switch to more and more renewable energies.

NMC are in addition actively looking for more sustainable sourcing and raw materials as well as more local suppliers to avoid long-distance transport as much as possible.

ARSTYL® LS2 reference included in this EPD.

Material Description ARSTYL® LS2	gr/m
A ASTL Corn LS2/240 21,6m	1046

References

General Program Instructions of the International EPD® System. Version 4.0.

Product category rules (PCR):

PCR 2019:14 v1.3.4. Construction products (EN 15804: A2) Version 1.0

c-PCR-005 Thermal insulation products (EN 16783: 2024)

Version: 2024-04-30

EN 15804

EN 15804:2012-04 + A2 2019: Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

EN 16783

EN 16783:2024-04: Thermal insulation products - Environmental Product Declarations (EPD) -

Product Category Rules (PCR) complementary to EN 15804 for factory made and in-situ formed products.

ISO 14025

DIN EN ISO 14025:2011-10: Environmental labels and declarations — Type III environmental declarations — Principles and procedures

ISO 14040:2006

ISO 14040:2006: Environmental management — Life cycle assessment — Principles and framework

ISO 14044:2006

ISO 14044:2006: Environmental management — Life cycle assessment — Requirements and guidelines

CEN/TR 15941:2010

CEN/TR 15941:2010: Sustainability of construction works - Environmental product declarations - Methodology for selection and use of generic data.

ISO 9001:2015

Quality management systems.

ISO 14001:2015

Environmental management systems.

EN 1602: 2013

EN 1602: 2013: Thermal insulating products for building applications. Determination of the apparent density

ISO 845:2006

ISO 845:2006: Cellular plastics and rubbers — Determination of apparent density

ISO 2896:2001

ISO 2896:2001: Rigid cellular plastics — Determination of water absorption

ISO 1798:2008

ISO 1798:2008: Flexible cellular polymeric materials — Determination of tensile strength and elongation at break

EN 16354:2019

Laminate floor coverings - Underlays - Specification, requirements, and test methods

Sphera LCA for Experts

Sphera LCA for Experts 10.9 (GaBi) LCA for Experts Software-System and Database for Life Cycle Engineering Copyright © 1992-2024 Sphera Solutions Gmbh Version: 10.9.0.20 DB Schema 8007

Sphera

Sphera Solutions Gmbh. LCA for Experts 10 LCI documentation. [GaBi Databases \(sphera.com\)](https://www.sphera.com) + ecoinvent integrated v3.10 database Stuttgart, Echterdingen: Sphera Solutions Gmbh.

Eurostat

European Statistics: Recovery rates for packaging wastepaper and cardboard packaging for the European Union 27 countries 2014 <http://ec.europa.eu/eurostat/home>

CEN/TS 16516:2013

CEN TS 16516/, AgBB/, /ISO 16000-3/, /ISO 16000-6/, /ISO16000-9/, /ISO 16000-11/ Construction products. Assessment of release of dangerous substances. Determination of emissions into indoor air

