Novelis

Environmental Product Declaration

According to ISO14025+EN15804+A2

This declaration is for:
HRC57S®

Provided by:
Novelis, Deutschland GmbH

MRPI® registration:
1.1.01072.2026

Program operator:
Stichting MRPI®
Publisher:
Stichting MRPI®
www.mrpi.nl

Date of first issue:
11-3-2026
Date of this issue:
11-3-2026
Expiry date:
11-3-2031

COMPANY INFORMATION

Novelis, Deutschland GmbH

Hannoversche Str. 1

D-37075

Göttingen

Germany

https://novelis.com/

MRPI® REGISTRATION

1.1.01072.2026

DATE OF THIS ISSUE

11-3-2026

EXPIRY DATE

11-3-2031

SCOPE OF DECLARATION

This MRPI®-EPD certificate is verified by Gert-Jan Vroege, Eco Intelligence. The LCA study has been done by Liz Adams, Ecomatters B.V. The certificate is based on an LCA-dossier according to ISO14025+EN15804+A2. It is verified according to the 'Verification protocol for MRPI LCA project report & EPD 21th of May 2025, V. 5.2'. EPDs of construction products may not be comparable if they do not comply with EN15804+A2. Declaration of SVHC that are listed on the 'Candidate list of Substances of Very High Concern for authorisation' when content exceeds the limits for registration with ECHA.

PRODUCT

HRC57S®

DECLARED UNIT / FUNCTIONAL UNIT

1 Area (m2)

DESCRIPTION OF PRODUCT

This product is a weighted average product calculated from 4 variations HRC57S®. Novelis HRC57S® is a decorative anodizing quality made from an ingot containing more than 90% recycled material (including pre- and post-consumer scrap).

VISUAL PRODUCT

PROGRAM OPERATOR

Stichting MRPI®

Kingsfordweg 151

1043 GR

Amsterdam

MORE INFORMATION

https://novelis.com/

Ing. L. L. Oosterveen MSc. MBA Managing Director MRPI	DEMONSTRATION OF VERIFICATION
	CEN standard EN15804 serves as the core PCR [1]
	Independent verification of the declaration and data according to ISO14025+EN15804+A2 Internal: External: X
	Third party verifier: Gert-Jan Vroege, Eco Intelligence
	[1] PCR = Product Category Rules

Novelis

DETAILED PRODUCT DESCRIPTION

HRC57S® (AlMg1) aluminium sheets and coils in anodizing quality are used for applications of all kinds in indoor and outdoor building. The sheets are rolled to the required thickness from an aluminium alloy and thermally treated according to customer requirements. Various sizes are available.

This EPD is for a calculated average product. For this calculation, 4 thickness variations of HRC57S® were considered. The environmental impact results shown on this EPD correspond only to the calculated average product and does not represent the 4 individual variations. The table below details the characteristics of the average product.

Average aluminium sheet characteristics	Value	Unit
Thickness	2,43	mm
Width	1250	mm
Length	1500	mm
Density	2710	kg/m3

Production Process
HRC57S® is produced using a DC cast ingot undergoing further production (hot rolling, cold rolling, annealing).

The production phase includes mainly the following steps:
1. Aluminium production and rolling
2. Slitting and cutting

Upstream aluminum processes include primary production, recycling, and remelting.
At the end-of-life stage, aluminum sheets should be dismantled and collected for treatment, as aluminum is highly recyclable. After collection, the sheets are processed through shredding and sorting to enable efficient recycling.

Component (> 1%)	(kg / %)
Primary Aluminium	9,6
Secondary Aluminium	90,4

SCOPE AND TYPE

The system boundaries of the EPD are defined as Cradle-to-Gate with the addition of modules C and D. All major steps per declared module, from the extraction of natural resources to the final disposal of the product, are included in the scope of the study. The life cycle stages covered are A1-A3, C1-C4 and D. The study was completed using the LCA software Sphera LCA for Experts (GaBi) 10.7.0.183 and background processes are taken from Ecoinvent v.3.10 (2024). The results are calculated using the characterisation method EN15804+A2 (2020).

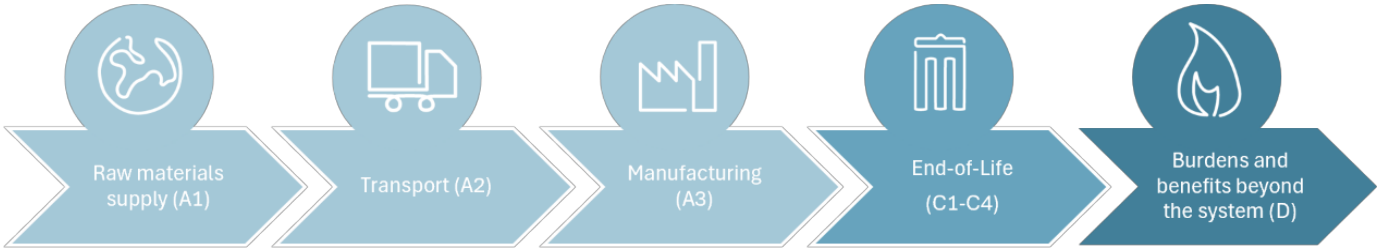
This EPD is an average calculation of 4 variations of the HRC57S® aluminium sheet and represents an average product manufactured across several locations in Germany. These are Stockach, Nachterstedt, and Norf. The product is sold globally and end-of-life is modelled within the European and Global context. Electricity was modelled using a market-based approach.

Novelis

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport gate to site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse - Recovery - Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
x	x	x	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X

X = Modules Assessed

ND = Not Declared



REPRESENTATIVENESS

This EPD is for a single average product calculated from 4 variations of HRC57S®. The weighted average product was calculated based on sales volumes of the 4 variants over the year 2023.

Full details of the characteristic of each of the variations included within the average calculation are described below in 'Calculation Rules'. The sales volumes used for the calculation are confidential.

Novelis

ENVIRONMENTAL IMPACT per functional unit or declared unit (core indicators A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	4,53E+00	1,03E+00	4,80E+00	1,04E+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	0,00E+00	0,00E+00	7,06E-02	1,91E+00	8,46E-03	-2,02E+00
GWP-fossil	kg CO2 eq.	4,52E+00	1,03E+00	4,71E+00	1,03E+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	0,00E+00	0,00E+00	7,06E-02	1,90E+00	8,40E-03	-1,96E+00
GWP-biogenic	kg CO2 eq.	1,17E-02	2,01E-03	7,57E-02	8,94E-02	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	0,00E+00	3,64E-05	9,46E-03	5,56E-05	-6,98E-03
GWP-luluc	kg CO2 eq.	5,46E-03	5,57E-04	9,67E-03	1,57E-02	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	0,00E+00	2,41E-05	1,58E-03	1,04E-05	-4,98E-02
ODP	kg CFC11 eq.	1,92E-09	1,93E-08	2,80E-06	2,82E-06	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	0,00E+00	1,42E-09	1,96E-08	1,53E-10	-3,34E-08
AP	mol H+ eq.	1,86E-02	4,68E-03	1,16E-02	3,49E-02	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	0,00E+00	2,28E-04	7,60E-03	4,85E-05	-1,26E-02
EP-fresh water	kg P eq.	2,14E-04	1,23E-04	3,03E-03	3,37E-03	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	0,00E+00	4,80E-06	4,57E-04	1,33E-06	-1,09E-03
EP-marine	kg N eq.	2,98E-03	1,62E-03	4,23E-03	8,82E-03	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	0,00E+00	7,79E-05	1,40E-03	2,64E-05	-1,70E-03
EP-terrestrial	mol N eq.	3,18E-02	1,74E-02	3,12E-02	8,05E-02	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	0,00E+00	8,42E-04	1,54E-02	1,83E-04	-1,50E-02
POCP	kg NMVOC eq.	9,07E-03	6,50E-03	1,24E-02	2,80E-02	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	0,00E+00	3,71E-04	5,04E-03	5,74E-05	-6,89E-03
ADP-minerals & metals	kg Sb eq.	2,82E-06	2,79E-06	1,43E-05	1,99E-05	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	0,00E+00	1,90E-07	4,21E-05	2,17E-08	2,16E-05
ADP-fossil	MJ, net calorific value	6,54E+01	1,51E+01	8,08E+01	1,61E+02	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	0,00E+00	1,03E+00	1,50E+01	1,48E-01	-3,31E+01
WDP	m3 world eq. Deprived	8,38E-02	1,40E-01	1,66E+00	1,89E+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	0,00E+00	0,00E+00	6,58E-03	3,24E-01	-5,39E-02	-3,61E+00

GWP-total	=	Global Warming Potential total
GWP-fossil	=	Global Warming Potential fossil fuels
GWP-biogenic	=	Global Warming Potential biogenictotal
GWP-luluc	=	Global Warming Potential land use and land use change
ODP	=	Depletion potential of the stratospheric ozone layer
AP	=	Acidification Potential, Accumulated Exceedence
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 Exceedence
POCP	=	Formation potential of tropospheric ozone photochemical oxidants
ADP-minerals & metals	=	Abiotic Depletion Potential for non-fossil resources [1]
ADP-fossil	=	Abiotic Depletion for fossil resources potential [1]
WDP	=	Water (user) deprivation potential, deprivation-weighted water consumption [1]

Disclaimer [1]:

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

ENVIRONMENTAL IMPACT per functional unit or declared unit (additional indicators A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PM	Disease inci-dence	2,78E-07	7,72E-08	8,54E-08	4,41E-07	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	0,00E+00	5,41E-09	1,02E-07	8,34E-10	-1,39E-07
IRP	kBq U235 eq.	1,39E+00	4,86E-02	6,10E-01	2,05E+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	0,00E+00	0,00E+00	1,24E-03	1,06E-01	3,12E-04	-5,59E-01
ETP-fw	CTUe	1,65E+01	4,36E+00	2,12E+01	4,20E+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	0,00E+00	0,00E+00	2,43E-01	1,07E+01	5,80E+01	1,50E-01
HTP-c	CTUh	3,19E-09	7,93E-09	1,38E-08	2,49E-08	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	0,00E+00	4,38E-10	1,07E-08	4,40E-11	-1,03E-08
HTP-nc	CTUh	2,42E-08	9,02E-09	3,59E-08	6,91E-08	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	0,00E+00	6,13E-10	4,03E-08	1,34E-09	-2,18E-08
SQP	-	3,34E+00	1,36E+01	4,00E+01	5,69E+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	0,00E+00	0,00E+00	1,03E+00	1,29E+01	2,18E-01	-1,05E+00

PM = Potential incidence of disease due to PM emissions

IRP = Potential Human exposure efficiency relative to U235 [1]

ETP-fw = Potential Comparative Toxic Unit for ecosystems [2]

HTP-c = Potential Comparative Toxic Unit for humans, cancer [2]

HTP-nc = Potential Comparative Toxic Unit for humans, non-cancer [2]

SQP = Potential soil quality index [2]

Disclaimer [1]:

- 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 nor due to radioactive waste.

Disclaimer [2]:

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

Novelis

OUTPUT FLOWS AND WASTE CATEGORIES per functional unit or declared unit (A1 and A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	2,74E-01	2,17E-02	9,08E-02	3,87E-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	0,00E+00	0,00E+00	1,01E-03	1,01E-01	8,41E-04	-4,99E-01
NHWD	kg	0,00E+00	0,00E+00	3,20E-03	3,20E-03	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	0,00E+00	0,00E+00	0,00E+00	3,29E-01	0,00E+00
RWD	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	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
CRU	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	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
MFR	kg	0,00E+00	0,00E+00	8,61E-01	8,61E-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	0,00E+00	0,00E+00	0,00E+00	6,25E+00	0,00E+00	0,00E+00
MER	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	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
EEE	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	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
ETE	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	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

HWD = Hazardous Waste Disposed
NHWD = Non Hazardous Waste Disposed
RWD = Radioactive Waste Disposed
CRU = Components for reuse
MFR = Materials for recycling
MER = Materials for energy recovery
EEE = Exported Electrical Energy
ETE = Exported Thermal Energy

Novelis

RESOURCE USE per functional unit or declared unit (A1 and A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	2,91E+01	5,23E-01	1,31E+01	4,28E+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	0,00E+00	0,00E+00	1,63E-02	1,71E+00	4,25E-03	-1,30E+01
PERM	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	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
PERT	MJ	2,91E+01	5,23E-01	1,31E+01	4,28E+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	0,00E+00	0,00E+00	1,63E-02	1,71E+00	4,25E-03	-1,30E+01
PENRE	MJ	6,54E+01	1,51E+01	8,08E+01	1,61E+02	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	0,00E+00	1,03E+00	1,50E+01	1,48E-01	-3,31E+01
PENRM	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	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
PENRT	MJ	6,54E+01	1,51E+01	8,08E+01	1,61E+02	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	0,00E+00	1,03E+00	1,50E+01	1,48E-01	-3,31E+01
SM	kg	5,94E+00	0,00E+00	0,00E+00	5,94E+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	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	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
NSRF	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	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	m3	1,95E-03	3,26E-03	3,87E-02	4,39E-02	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	0,00E+00	1,53E-04	7,54E-03	-1,26E-03	-8,41E-02

PERE = Use of renewable primary energy excluding renewable primary energy 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 resources excluding non-renewable 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 resources
SM = Use of secondary materials
RSF = Use of renewable secondary fuels
NSRF = Use of non-renewable secondary fuels
FW = Use of net fresh water

BIOGENIC CARBON CONTENT per functional unit or declared unit (A1 and A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
BBCpr	kg C	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	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
BCCpa	kg C	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	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

BCCpr = Biogenic carbon content in product
BCCpa = Biogenic carbon content in packaging

Novelis

CALCULATION RULES

Data quality and data collection period
Data quality requirements follow EN15804+A2:2019 Annex E, Table E.2. Used datasets are complete according to the system boundary, and are as current as possible. Foreground data is for the reference period 2023. Processes used in the background modelling are taken from Ecoinvent 3.10 (cut off by classification), the widely used LCA database and are consistent with the foreground modelling in system limits and allocation procedures. Additional datasets are taken from European Aluminium, the primary association representing the European aluminium industry. The technological and geographical coverage of the chosen datasets reflects the physical reality as far as possible, taking into account the technology mix, location, and representativeness of technologies, input materials, and input energies for the region. Data quality is assessed as good on average and adequate to the goal and scope of the study.

Cut-off criteria
Cut-off within the background processes (Ecoinvent v.3.10 datasets) is according to the respective methodologies (see documentation of the relevant processes (Wernet et al., 2016)). A cut-off was applied to packaging used for the transportation of the aluminium sheets between manufacturing sites. This was due to its reuse and lifetime. This cut-off is not expected to impact the results of the LCA or the conclusions drawn from the study.

Allocation procedure
Emissions and inputs to the manufacturing process is applied to the final product based on mass considering an annual production of aluminium sheets. System allocation in the background processes is according to the documentation of the relevant processes (Wernet et al., 2016) and presumed to follow the accommodated approach (“cut-off” libraries).

Variation	Thickness (mm)	Width (mm)	Average length (mm)	Density (kg/m3)	Square meters produced per 1 ton of Alu (sqm)
1	1	1250	2500	2710	369
2	1,5	1250	2500	2710	246
3	2	1250	2500	2710	184,5
4	3	1250	2500	2710	123

SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

The product stage is reported in life cycle stages A1-A3. This life cycle stage includes the extraction and processing of raw materials for the product, its transportation to the production site, and the manufacturing process. The manufacturing stage (A3) includes all processes related to manufacturing of the aluminium sheet, including energy consumption and waste treatment, for which specific data is available. Electricity consumption is modelled using primary data and datasets for the German market mix. For transportation of raw materials, a default scenario was used from the Product Environmental Footprint method (PEF 3.1) (European Commission, 2021). Transportation between manufacturing sites was modelled with provided primary data.

For the end-of-life stage (C), a scenario is used which is based on Ecoinvent 3.10 datasets and default values taken from the European Aluminium General Program Instructions (2020).Transport to End-of-Life was modelled using a default scenario from the Product Environmental Footprint method (PEF 3.1) (European Commission, 2021). To calculate the benefits and loads beyond the system boundaries (module D), Formula D.6. from EN1504+A2 was used.

Transport of raw materials	Distance	Unit
Truck (>32t, EURO 5)	230	km
Train (average freight train)	280	km
Ship (barge)	360	km

End-of-Life scenario aluminium sheets	Value	Unit
Recycled	95	%
Landfilled	5	%
Distance to EOL treatment	100	km

SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION (PART 3)

The EPD is calculated using a weighted average of four product variations of HRC57S®. The table below details the results of the key environmental impact indicators for each of the four variations included within the average calculation and their % difference from the calculated EPD value. The range of difference between the variations and calculated EPD value is -59% to +24%.

Core environmental impact indicators	1	2	3	4
Climate Change - total [kg CO2 eq.]	-59%	-38%	-18%	24%
Climate Change, fossil [kg CO2 eq.]	-59%	-38%	-18%	24%
Climate Change, biogenic [kg CO2 eq.]	-59%	-38%	-18%	24%
Climate Change, land use and land use change [kg CO2 eq.]	-59%	-38%	-18%	24%
Ozone depletion [kg CFC-11 eq.]	-59%	-38%	-18%	24%
Acidification [Mole of H+ eq.]	-59%	-38%	-18%	24%
Eutrophication, freshwater [kg P eq.]	-59%	-38%	-18%	24%
Eutrophication, marine [kg N eq.]	-59%	-38%	-18%	24%
Eutrophication, terrestrial [Mole of N eq.]	-59%	-38%	-18%	24%
Photochemical ozone formation, human health [kg NMVOC	-59%	-38%	-18%	24%
Resource use, mineral, and metals [kg Sb eq.]	-59%	-38%	-18%	24%
Resource use, fossils [MJ]	-59%	-38%	-18%	24%
Water use [m³ world equiv.]	-59%	-38%	-18%	24%

DECLARATION OF SVHC

None of the raw materials contained in the product are listed in the “Candidate List of Substances of Very High Concern for authorisation”, or they do not exceed the threshold with the European Chemicals Agency.

REFERENCES

•EN 15804:2012+A2:2019 Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products, of 2019
•European Aluminium General Program Instructions (2020). [online] Available at: https://european-aluminium.eu/wp-content/uploads/2022/12/EPD-programme-rules-3rd-rev-European-Aluminium.pdf Last accessed 26/09/24
•European Commission. (2021). Annex II: Product Environmental Footprint Method. In Environmental Footprint Guidance Document. Retrieved from: https://environment.ec.europa.eu/document/download/680503dc-5a19-4f6a-bb92-84d9bfc8f312_en?filename=Annexes%201%20to%202.pdf
•ISO 14040:2006 Environmental management — Life cycle assessment — Principles and framework
•ISO 14044:2006 Environmental management — Life cycle assessment — Requirements and guidelines
•Sphera LCA for Experts Software-System and Database for Life Cycle Engineering. Copyright 2024 Sphera.
•Wernet, G., Bauer, C., Steubing, B., Reinhard, J., Moreno-Ruiz, E., & Weidema, B. (2016). The Ecoinvent database version 3 (part I): overview and methodology. International Journal of Life Cycle Assessment, 21(9), 1218–1230. https://doi.org/10.1007/s11367-016-1087-8

REMARKS

There are no further remarks.