

Environmental Product Declaration

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

Threaded Fittings



Nords International AB



Programme	The International EPD System, www.environdec.com
Programme operator	EPD International AB
Type of EPD	EPD of multiple products, based on the average results of the product group
EPD registration number	EPD-IES-0024809:001
Version date	2026-05-11
Validity date	2031-05-11

For full list of included products, see pages 5-20

An EPD should provide current information and may be updated or unpublished if conditions change. To find the latest version of the EPD and to confirm its validity, see 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	support@environdec.com

PCR and verification

Product Category Rules (PCR)	CEN standard EN 15804 serves as the Core Product Category Rules (PCR) PCR 2019:14 Construction products (EN 15804:A2) (2.0.1) PCR review was conducted by the Technical Committee of the International EPD System. See https://environdec.com/about-us/the-international-epd-system-about-the-system for a list of members. Review chair: Rob Rouwette (chair), Noa Meron (co-chair). The review panel may be contacted via the Secretariat www.environdec.com/contact.
Third-party verification:	External and independent "third-party" verification of the declaration and data, according to ISO14025:2006, via EPD verification through: ☒ Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: Kristin Fransson, RISE Research Institute of Sweden Approved by: The International EPD System
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☒ No	

Ownership and limitations on use of EPD

The EPD owner has the sole ownership, liability and responsibility for the EPD. EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit 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/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison.

Information about EPD owner

Owner details

EPD owner	Nords International AB
Contact	Simon Hedberg
Contact details	simon.hedberg@nordsinternational.com
Address	Prostgårdsvägen 2 655 60 Molkom Sweden
Description of the organisation	Nords Group consists of the mother company Nords International AB and the two subsidiaries SH-Teknor Oy and Nords AS. The company is a leading manufacturer of stainless-steel components with three manufacturing sites located in Molkom (Sweden), Helsinki (Finland) and Saue (Estonia).
Product-related or management system-related certifications:	ISO 9001- and 14001-certificates, AD 2000-Merkblatt W0, PED 2014/68/EU
Life Cycle Assessment (LCA)	Viktor Hakkarainen & Albin Sumukari, CHM Analytics AB

Product Information

Product details

Product name(s)	Threaded fittings
Product description:	Stainless steel threaded fittings for pipe connections. The products included in the EPD varies in what site they come from and what % becomes spillage during production. The worst case indicators are based on the highest spillage % from all three different sites.
UN CPC code	41293 - Tube or pipe fittings
Name and location of production site(s):	Name of plant: Nords International AB Molkom Location: Molkom, Sweden Name of plant: Nords AS Saue Location: Saue, Estonia Name of plant: SH-Teknor OY Tuusula Location: Tuusula, Finland
Technical or actual lifespan	N/A

Product image



Manufacturing process

A stainless steel rod is loaded into a CNC lathe where it is milled to specified outer diameter, inner and/or outer threads are cut and the inside bored out.

Product Table

Product Name	Article Number	Mass in kg
Threaded fittings	N/A	1,000
Gängörödel	R-143 3/8" EN 1.4404 - Worst case check	1,000
Gängörödel	Förminskningsnippel NPT 1 - 1/2	0,168
Gängörödel	Förminskningsnippel NPT 3/8 - 1/4	0,030
Gängörödel	Letkuliitin NPT 1/2" X 16	0,058
Gängörödel	LR-131 1 1/2" Hylsa EN 1.4404	0,145
Gängörödel	LR-131 1 1/4" Hylsa EN 1.4404	0,094
Gängörödel	LR-131 1" Hylsa EN 1.4404	0,076
Gängörödel	LR-131 1/2" Hylsa EN 1.4404	0,030
Gängörödel	LR-131 1/4" Hylsa EN 1.4404	0,015
Gängörödel	LR-131 1/8" Hylsa EN 1.4404	0,021
Gängörödel	LR-131 2 1/2" Hylsa EN 1.4404	0,925
Gängörödel	LR-131 2" Hylsa EN 1.4404	0,250
Gängörödel	LR-131 3" Hylsa EN 1.4404	0,489
Gängörödel	LR-131 3/4" Hylsa EN 1.4404	0,049
Gängörödel	LR-131 3/8" Hylsa EN 1.4404	0,020
Gängörödel	LR-131 LR131U 1" Nippel 4404	0,120
Gängörödel	LR-131 LR131U 1/2" Nippel 4404	0,040
Gängörödel	LR-131 LR131U 1/4" Nippel 4404	0,020
Gängörödel	LR-131 LR131U 1/8" Nippel 4404	0,028
Gängörödel	LR-131 LR131U 1 1/2" Nipp. 4404	0,255
Gängörödel	LR-131 LR131U 1 1/4" Nipp. 4404	0,172
Gängörödel	LR-131 LR131U 2" Nippel 4404	0,395
Gängörödel	LR-131 LR131U 2 1/2" Nipp. 4404	1,428
Gängörödel	LR-131 LR131U 3" Nippel 4404	0,905
Gängörödel	LR-131 LR131U 3/4" Nippel 4404	0,079
Gängörödel	LR-131 LR131U 3/8" Nippel 4404	0,031
Gängörödel	LR-131O 1 1/2" Nippel 4404	0,245
Gängörödel	LR-131O 1 1/4" Nippel 4404	0,167
Gängörödel	LR-131O 1" Nippel 4404	0,111

Product Name	Article Number	Mass in kg
Gängörödel	LR-131O 1/2" Nippel 4404	0,040
Gängörödel	LR-131O 1/4" Nippel 4404	0,018
Gängörödel	LR-131O 2" Nippel 4404	0,391
Gängörödel	LR-131O 3/4" Nippel 4404	0,077
Gängörödel	LR-131O 3/8" Nippel 4404	0,026
Gängörödel	LR-131S 13,5X1,6 HYLSA 316L	0,015
Gängörödel	LR-131S 13,5X1,6 NIPPEL 316L	0,025
Gängörödel	LR-131S 14 x 10 Hylsa 1.4404	0,015
Gängörödel	LR-131S 14 X 10 Nippel 4404	0,025
Gängörödel	LR-131S 17,2X1,6 HYLSA 316L	0,020
Gängörödel	LR-131S 17,2X1,6 NIPPEL 316L	0,037
Gängörödel	LR-131S 18 x 14 Hylsa 1.4404	0,020
Gängörödel	LR-131S 18 X 14 Nippel 4404	0,037
Gängörödel	LR-131S 21,3 x 16 Hylsa 1.4404	0,034
Gängörödel	LR-131S 21,3 X 16 Nippel 4404	0,057
Gängörödel	LR-131S 21,3 x 18,1 (1,6) Hylsa 1.4404	0,034
Gängörödel	LR-131S 21,3X1,6 HYLSA 316L	0,034
Gängörödel	LR-131S 25 x 20 Hylsa 1.4404	0,051
Gängörödel	LR-131S 25 X 20 Nippel 4404	0,102
Gängörödel	LR-131S 26,9 x 23 Hylsa 1.4404	0,046
Gängörödel	LR-131S 26,9 X 23 Nippel 4404	0,091
Gängörödel	LR-131S 26,9X1,6 HYLSA 316L	0,046
Gängörödel	LR-131S 26,9X1,6 NIPPEL 316L	0,091
Gängörödel	LR-131S 30 x 25 Hylsa 1.4404	0,046
Gängörödel	LR-131S 30 X 25 Nippel 4404	0,088
Gängörödel	LR-131S 33,7X2,0 HYLSA 316L	0,081
Gängörödel	LR-131S 33,7x27,2 Hylsa 1.4404	0,081
Gängörödel	LR-131S 33,7X27,2 Nippel 4404	0,151
Gängörödel	LR-131S 34 x 30 Hylsa 1.4404	0,125
Gängörödel	LR-131S 34 X 30 Nippel 4404	0,123
Gängörödel	LR-131S 38 x 34 Hylsa 1.4404	0,106

Product Name	Article Number	Mass in kg
Gängörödel	LR-131S 38 X 34 Nippel 4404	0.250
Gängörödel	LR-131S 42,4 x 36 Hylsa 1.4404	0.109
Gängörödel	LR-131S 42,4 X 36 Nippel 4404	0.221
Gängörödel	LR-131S 44,5 x 40 Hylsa 1.4404	0.075
Gängörödel	LR-131S 44,5 X 40 Nippel 4404	0.179
Gängörödel	LR-131S 48,3 x 43 Hylsa 1.4404	0.140
Gängörödel	LR-131S 48,3 X 43 Nippel 4404	0.301
Gängörödel	LR-131S 48,3x2,0 HYLsa 316L	0.130
Gängörödel	LR-131S 51 x 47 Hylsa 1.4404	0.130
Gängörödel	LR-131S 51 X 47 Nippel 4404	0.234
Gängörödel	LR-131S 54 x 50 Hylsa 1.4404	0.130
Gängörödel	LR-131S 54 X 50 Nippel 4404	0.206
Gängörödel	LR-131S 60,3 x 55 Hylsa 1.4404	0.210
Gängörödel	LR-131S 60,3 X 55 Nippel 4404	0.405
Gängörödel	LR-131S 60,3x2,0 HYLsa 316L	0.187
Gängörödel	LR-131U 1 1/2" Hylsa EN 1.4404	0.289
Gängörödel	LR-131U 1 1/4" Hylsa EN 1.4404	0.254
Gängörödel	LR-131U 1" Hylsa EN 1.4404	0.153
Gängörödel	LR-131U 1" NPT Hylsa EN 1.4404	0.150
Gängörödel	LR-131U 1/2" Hylsa EN 1.4404	0.064
Gängörödel	LR-131U 1/4" Hylsa EN 1.4404	0.026
Gängörödel	LR-131U 1/8" Hylsa EN 1.4404	0.026
Gängörödel	LR-131U 2 1/2" Hylsa EN 1.4404	1.088
Gängörödel	LR-131U 2" Hylsa EN 1.4404	0.417
Gängörödel	LR-131U 3" Hylsa EN 1.4404	0.959
Gängörödel	LR-131U 3/4" Hylsa EN 1.4404	0.101
Gängörödel	LR-131U 3/8" Hylsa EN 1.4404	0.041
Gängörödel	MU.LR M110X2 128 (21/2"-3")316L	1.039
Gängörödel	MU.LR M26X1,5 30 6-K(3/8" 316L	0.036
Gängörödel	MU.LR M30X1,5 36 6-K (½")316L	0.060
Gängörödel	MU.LR M38X1,5 41,8 (3/4")316L	0.081

Product Name	Article Number	Mass in kg
Gängörödel	MU.LR M45X2 50 6-K (1")316L	0.114
Gängörödel	MU.LR M54X2 60 6-K (1 ¼") 316L	0.164
Gängörödel	MU.LR M62X2 67 8-K(1 1/2")316L	0.187
Gängörödel	MU.LR M75X2 85,5 8-K (2")316L	0.481
Gängörödel	MU.LRM22X1.5 27 6K 1/8"-¼"316L	0.031
Gängörödel	MU.R 79,2X1/11 85,5ÅTT(2")316L	0.418
Gängörödel	MU.R G 1/2" (1/8") 316L	0.025
Gängörödel	MU.R G1 3/4" 60SEXX.(1") 316L	0.185
Gängörödel	MU.R G1 3/8" 50SEXX.(3/4")316L	0.134
Gängörödel	MU.R G1" 38 SEXK.(3/8") 316L	0.070
Gängörödel	MU.R G11/8" 42 SEXK.(1/2")316L	0.089
Gängörödel	MU.R G2" 67ÅTTK.(1 1/4") 316L	0.251
Gängörödel	MU.R G21/4"72ÅTTK.(11/2")316L	0.314
Gängörödel	MU.R G3/4" 30SEXX.(1/4") 316L	0.037
Gängörödel	MU.R G31/2"110ÅTTK (21/2")316L	0.618
Gängörödel	MU.R G4" 124ÅTTK (3") 316L	1.040
Gängörödel	Muutosnip. NPT3/8u x NPT1/2s.	0.088
Gängörödel	Muutosnipa NPT 1/4 u x NPT 1/4 s	0.030
Gängörödel	Propp, 6-k NPT 1	0.190
Gängörödel	Propp, 6-k NPT 1.1/2	0.480
Gängörödel	Propp, 6-k NPT 1.1/4	0.360
Gängörödel	Propp, 6-k NPT 1/2	0.050
Gängörödel	Propp, 6-k NPT 1/8	0.011
Gängörödel	Propp, 6-k NPT 3/4	0.110
Gängörödel	Propp, 6-k NPT 3/8	0.030
Gängörödel	R-131 1 1/2" Hylsa EN 1.4404	0.258
Gängörödel	R-131 1 1/4" Hylsa EN 1.4404	0.213
Gängörödel	R-131 1" Hylsa EN 1.4404	0.176
Gängörödel	R-131 1/2" Hylsa EN 1.4404	0.076
Gängörödel	R-131 1/4" Hylsa EN 1.4404	0.036
Gängörödel	R-131 1/8" Hylsa EN 1.4404	0.019

Product Name	Article Number	Mass in kg
Gängörödel	R-131 2 1/2" Hylsa EN 1.4404	0.567
Gängörödel	R-131 2" Hylsa EN 1.4404	0.384
Gängörödel	R-131 3" Hylsa EN 1.4404	0.724
Gängörödel	R-131 3/4" Hylsa EN 1.4404	0.107
Gängörödel	R-131 3/8" Hylsa EN 1.4404	0.051
Gängörödel	R-131 R131U 1 1/2" Nippel 4404	0.290
Gängörödel	R-131 R131U 1 1/4" Nippel 4404	0.228
Gängörödel	R-131 R131U 1" Nippel 1.4404	0.199
Gängörödel	R-131 R131U 1/2" Nippel 1.4404	0.078
Gängörödel	R-131 R131U 1/4" Nippel 1.4404	0.034
Gängörödel	R-131 R131U 1/8" Nippel 1.4404	0.018
Gängörödel	R-131 R131U 2 1/2" Nippel 4404	0.658
Gängörödel	R-131 R131U 2" Nippel 1.4404	0.411
Gängörödel	R-131 R131U 3" Nippel 1.4404	0.856
Gängörödel	R-131 R131U 3/4" Nippel 1.4404	0.113
Gängörödel	R-131 R131U 3/8" Nippel 1.4404	0.054
Gängörödel	R-131S 14 x 10 Hylsa 1.4404	0.017
Gängörödel	R-131S 18 x 14 Hylsa 1.4404	0.048
Gängörödel	R-131S 21,3 x 16 Hylsa 1.4404	0.046
Gängörödel	R-131S 25 x 20 Hylsa 1.4404	0.060
Gängörödel	R-131S 26,9 x 23 Hylsa 1.4404	0.055
Gängörödel	R-131S 30 x 25 Hylsa 1.4404	0.092
Gängörödel	R-131S 33,7x27,2 Hylsa 1.4404	0.184
Gängörödel	R-131S 34 x 30 Hylsa 1.4404	0.157
Gängörödel	R-131S 38 x 34 Hylsa 1.4404	0.125
Gängörödel	R-131S 42,4 x 36 Hylsa 1.4404	0.224
Gängörödel	R-131S 44,5 x 40 Hylsa 1.4404	0.174
Gängörödel	R-131S 48,3 x 43 Hylsa 1.4404	0.253
Gängörödel	R-131S 51 x 47 Hylsa 1.4404	0.190
Gängörödel	R-131S 54 x 50 Hylsa 1.4404	0.427
Gängörödel	R-131S 60,3 x 55 Hylsa 1.4404	0.353

Product Name	Article Number	Mass in kg
Gängörödel	R-131S 77 x 71 Hylsa 1.4404	0.583
Gängörödel	R-131S 89 x 81,7 Hylsa 1.4404	0.785
Gängörödel	R-131U 1 1/2" Hylsa EN 1.4404	0.481
Gängörödel	R-131U 1 1/4" Hylsa EN 1.4404	0.418
Gängörödel	R-131U 1" Hylsa EN 1.4404	0.286
Gängörödel	R-131U 1/2" Hylsa EN 1.4404	0.123
Gängörödel	R-131U 1/4" Hylsa EN 1.4404	0.049
Gängörödel	R-131U 1/8" Hylsa EN 1.4404	0.028
Gängörödel	R-131U 2 1/2" Hylsa EN 1.4404	1.048
Gängörödel	R-131U 2" Hylsa EN 1.4404	0.705
Gängörödel	R-131U 3" Hylsa EN 1.4404	1.521
Gängörödel	R-131U 3/4" Hylsa EN 1.4404	0.173
Gängörödel	R-131U 3/8" Hylsa EN 1.4404	0.076
Gängörödel	R-132 10/10,2 Mutter 316L	0.020
Gängörödel	R-132 12 Mutter 316L	0.026
Gängörödel	R-132 14 Mutter 316L	0.043
Gängörödel	R-132 15 Mutter 316L	0.046
Gängörödel	R-132 16 Mutter 316L	0.044
Gängörödel	R-132 17/17,2 Mutter 316L	0.073
Gängörödel	R-132 18 Mutter 316L	0.067
Gängörödel	R-132 20 Mutter 316L	0.085
Gängörödel	R-132 21,3 Mutter 316L	0.084
Gängörödel	R-132 23 Mutter 316L	0.080
Gängörödel	R-132 6 Mutter 316L	0.011
Gängörödel	R-132 8 Mutter 316L	0.015
Gängörödel	R-1321 10 Kropp rak EN 1.4404	0.024
Gängörödel	R-1321 10,2 Kropp rak 1.4404	0.024
Gängörödel	R-1321 12 Kropp rak EN 1.4404	0.029
Gängörödel	R-1321 14 Kropp rak EN 1.4404	0.053
Gängörödel	R-1321 15 Kropp rak EN 1.4404	0.047
Gängörödel	R-1321 16 Kropp rak EN 1.4404	0.046

Product Name	Article Number	Mass in kg
Gängörödel	R-1321 17 Kropp rak EN 1.4404	0.057
Gängörödel	R-1321 17,2 Kropp rak 1.4404	0.057
Gängörödel	R-1321 18 Kropp rak EN 1.4404	0.068
Gängörödel	R-1321 20 Kropp rak EN 1.4404	0.104
Gängörödel	R-1321 21,3 Kropp rak 1.4404	0.096
Gängörödel	R-1321 23 Kropp rak EN 1.4404	0.084
Gängörödel	R-1321 25 Kropp rak EN 1.4404	0.112
Gängörödel	R-1321 8 Kropp rak EN 1.4404	0.021
Gängörödel	R-1322 10,2x1/4" Kropp 1.4404	0.037
Gängörödel	R-1322 10x1/4" Kropp EN 1.4404	0.031
Gängörödel	R-1322 10x1/4" NPT Kropp EN 1.4404	0.031
Gängörödel	R-1322 10x3/8" Kropp EN 1.4404	0.037
Gängörödel	R-1322 12x1/2" Kropp EN 1.4404	0.057
Gängörödel	R-1322 12x1/4" Kropp EN 1.4404	0.042
Gängörödel	R-1322 12x3/8" Kropp EN 1.4404	0.036
Gängörödel	R-1322 14x1/2" Kropp EN 1.4404	0.067
Gängörödel	R-1322 15x1/2" Kropp EN 1.4404	0.064
Gängörödel	R-1322 15x3/4" Kropp EN 1.4404	0.064
Gängörödel	R-1322 15x3/8" Kropp EN 1.4404	0.064
Gängörödel	R-1322 16x1/2" Kropp EN 1.4404	0.060
Gängörödel	R-1322 17,2x1/2" Kropp 1.4404	0.073
Gängörödel	R-1322 17,2x3/4" Kropp 1.4404	0.092
Gängörödel	R-1322 17x1/2" Kropp EN 1.4404	0.074
Gängörödel	R-1322 18x1/2" Kropp EN 1.4404	0.069
Gängörödel	R-1322 18x3/8" Kropp EN 1.4404	0.073
Gängörödel	R-1322 20x1/2" Kropp EN 1.4404	0.095
Gängörödel	R-1322 20x3/4" Kropp EN 1.4404	0.113
Gängörödel	R-1322 21,3x3/4" Kropp 1.4404	0.100
Gängörödel	R-1322 23x3/4" Kropp EN 1.4404	0.096
Gängörödel	R-1322 25x3/4" Kropp EN 1.4404	0.118
Gängörödel	R-1322 6x1/2" Kropp EN 1.4404	0.065

Product Name	Article Number	Mass in kg
Gängörödel	R-1322 6x1/4" Kropp EN 1.4404	0.021
Gängörödel	R-1322 6x1/8" Kropp EN 1.4404	0.027
Gängörödel	R-1322 6x3/8" Kropp EN 1.4404	0.034
Gängörödel	R-1322 8x1/4" Kropp EN 1.4404	0.026
Gängörödel	R-1322 8x3/8" Kropp EN 1.4404	0.034
Gängörödel	R-141 1 1/2" L=100 EN 1.4404	0.328
Gängörödel	R-141 1 1/4" L=70 EN 1.4404	0.191
Gängörödel	R-141 1" L=70 EN 1.4404	0.149
Gängörödel	R-141 1/2" L=70 EN 1.4404	0.069
Gängörödel	R-141 1/4" L=70 EN 1.4404	0.037
Gängörödel	R-141 2" L=100 EN 1.4404	0.469
Gängörödel	R-141 3/4" L=70 EN 1.4404	0.095
Gängörödel	R-141 3/8" L=70 EN 1.4404	0.048
Gängörödel	R-142 1 1/2" L=100 EN 1.4404	0.292
Gängörödel	R-142 1 1/4" L=70 EN 1.4404	0.170
Gängörödel	R-142 1" L=70 EN 1.4404	0.120
Gängörödel	R-142 1/2" L=70 EN 1.4404	0.066
Gängörödel	R-142 1/4" L=70 EN 1.4404	0.034
Gängörödel	R-142 2" L=100 EN 1.4404	0.413
Gängörödel	R-142 3/4" L=70 EN 1.4404	0.084
Gängörödel	R-142 3/8" L=70 EN 1.4404	0.046
Gängörödel	R-143 1 1/2" EN 1.4404	0.169
Gängörödel	R-143 1 1/4" EN 1.4404	0.144
Gängörödel	R-143 1" EN 1.4404	0.051
Gängörödel	R-143 1/2" EN 1.4404	0.019
Gängörödel	R-143 1/4" EN 1.4404	0.006
Gängörödel	R-143 2" EN 1.4404	0.345
Gängörödel	R-143 3/4" EN 1.4404	0.038
Gängörödel	R-143 3/8" EN 1.4404	0.012
Gängörödel	R-144 1 1/2" D=41 EN 1.4404	0.434
Gängörödel	R-144 1 1/4" D=33 EN 1.4404	0.345

Product Name	Article Number	Mass in kg
Gängörödel	R-144 1" D=26,5 EN 1.4404	0.155
Gängörödel	R-144 1/2" D=14 EN 1.4404	0.055
Gängörödel	R-144 1/4" D=8,5 EN 1.4404	0.022
Gängörödel	R-144 1/8" D=6,5 EN 1.4404	0.017
Gängörödel	R-144 2" D=51 EN 1.4404	0.778
Gängörödel	R-144 3/4" D=21 EN 1.4404	0.100
Gängörödel	R-144 3/8" D=11 EN 1.4404	0.039
Gängörödel	R-144 Sexkantslangn. 1 1/2"-40	0.484
Gängörödel	R-144 Sexkantslangn. 1 1/4 x 38	0.490
Gängörödel	R-144 Sexkantslangn. 1 1/4"-25	0.390
Gängörödel	R-144 Sexkantslangn. 1 1/4"-32	0.380
Gängörödel	R-144 Sexkantslangn. 1 x 20	0.195
Gängörödel	R-144 Sexkantslangn. 1"-25	0.195
Gängörödel	R-144 Sexkantslangn. 1"-32	0.210
Gängörödel	R-144 Sexkantslangn. 1/2"-10	0.060
Gängörödel	R-144 Sexkantslangn. 1/2"-10	0.060
Gängörödel	R-144 Sexkantslangn. 1/2"-13	0.060
Gängörödel	R-144 Sexkantslangn. 1/2"-16	0.060
Gängörödel	R-144 Sexkantslangn. 1/2"-16	0.060
Gängörödel	R-144 Sexkantslangn. 1/2"-19	0.060
Gängörödel	R-144 Sexkantslangn. 1/8 x 10	0.020
Gängörödel	R-144 Sexkantslangn. 1/8"-6	0.015
Gängörödel	R-144 Sexkantslangn. 1/8"-8	0.014
Gängörödel	R-144 Sexkantslangn. 3/8 x 18	0.060
Gängörödel	R-144 Sexkantslangn. 3/8 x 8	0.035
Gängörödel	R-144 Sexkantslangn. 3/8 x 8	0.035
Gängörödel	R-144 Sexkantslangn. 3/8"-10	0.032
Gängörödel	R-144 Sexkantslangn. 3/8"-13	0.030
Gängörödel	R-144 Sexkantslangn. 3/8"-16	0.045
Gängörödel	R-144 Slangnippel 1/2x09	0.060
Gängörödel	R-202 1 1/2" x 1 1/4" EN1.4404	0.310

Product Name	Article Number	Mass in kg
Gängörödel	R-202 1 1/2" x 1" EN 1.4404	0.310
Gängörödel	R-202 1 1/2" x 3/4" EN 1.4404	0.345
Gängörödel	R-202 1 1/4" x 1" EN 1.4404	0.235
Gängörödel	R-202 1 1/4" x 1/2" EN 1.4404	0.270
Gängörödel	R-202 1 1/4" x 3/4" EN 1.4404	0.270
Gängörödel	R-202 1" x 1/2" EN 1.4404	0.175
Gängörödel	R-202 1" x 3/4" EN 1.4404	0.150
Gängörödel	R-202 1/2" x 1/4" EN 1.4404	0.075
Gängörödel	R-202 1/2" x 3/8" EN 1.4404	0.075
Gängörödel	R-202 1/4" x 1/8" EN 1.4404	0.035
Gängörödel	R-202 2 1/2 x 2" EN 1.4404	0.810
Gängörödel	R-202 2" x 1 1/2" EN 1.4404	0.530
Gängörödel	R-202 2" x 1 1/4" EN 1.4404	0.515
Gängörödel	R-202 2" x 1" EN 1.4404	0.580
Gängörödel	R-202 2" x 1/2" EN 1.4404	0.566
Gängörödel	R-202 2" x 3/4" EN 1.4404	0.580
Gängörödel	R-202 3" x 2 1/2" EN 1.4404	1.095
Gängörödel	R-202 3" x 2" EN 1.4404	1.095
Gängörödel	R-202 3/4" x 1/2" EN 1.4404	0.105
Gängörödel	R-202 3/4" x 3/8" EN 1.4404	0.100
Gängörödel	R-202 3/8" x 1/4" EN 1.4404	0.040
Gängörödel	R-206 1 1/2" L=38 EN 1.4404	0.080
Gängörödel	R-206 1 1/4" L=38 EN 1.4404	0.070
Gängörödel	R-206 1" L=35 EN 1.4404	0.055
Gängörödel	R-206 1/2" L=25 EN 1.4404	0.020
Gängörödel	R-206 1/4" L=18 EN 1.4404	0.010
Gängörödel	R-206 1/8" L=16 EN 1.4404	0.005
Gängörödel	R-206 2 1/2" L=55 EN 1.4404	0.235
Gängörödel	R-206 2" L=45 EN 1.4404	0.135
Gängörödel	R-206 3" L=60 EN 1.4404	0.295
Gängörödel	R-206 3/4" L=30 EN 1.4404	0.030

Product Name	Article Number	Mass in kg
Gängörödel	R-206 3/8" L=22 EN 1.4404	0.015
Gängörödel	R-207 1 1/2" EN 1.4404	0.260
Gängörödel	R-207 1 1/4" EN 1.4404	0.210
Gängörödel	R-207 1" EN 1.4404	0.130
Gängörödel	R-207 1/2" EN 1.4404	0.050
Gängörödel	R-207 1/4" EN 1.4404	0.020
Gängörödel	R-207 1/8" EN 1.4404	0.010
Gängörödel	R-207 2 1/2" EN 1.4404	0.625
Gängörödel	R-207 2" EN 1.4404	0.430
Gängörödel	R-207 3" EN 1.4404	0.830
Gängörödel	R-207 3/4" EN 1.4404	0.090
Gängörödel	R-207 3/8" EN 1.4404	0.030
Gängörödel	R-207 4" EN 1.4404	2.020
Gängörödel	R-207 Sexkantnippel 1/2	0.050
Gängörödel	R-207 Sexkantnippel 3/4	0.090
Gängörödel	R-207 Sexkantnippel 3/8	0.030
Gängörödel	R-209 1 1/2" x 1 1/4" EN1.4404	0.285
Gängörödel	R-209 1 1/2" x 1" EN 1.4404	0.295
Gängörödel	R-209 1 1/2" x 1/2" EN 1.4404	0.280
Gängörödel	R-209 1 1/2" x 3/4" EN 1.4404	0.280
Gängörödel	R-209 1 1/4" x 1" EN 1.4404	0.260
Gängörödel	R-209 1 1/4" x 1/2" EN 1.4404	0.195
Gängörödel	R-209 1 1/4" x 3/4" EN 1.4404	0.250
Gängörödel	R-209 1" x 1/2" EN 1.4404	0.120
Gängörödel	R-209 1" x 1/4" EN 1.4404	0.110
Gängörödel	R-209 1" x 3/4" EN 1.4404	0.125
Gängörödel	R-209 1" x 3/8" EN 1.4404	0.125
Gängörödel	R-209 1/2" x 1/4" EN 1.4404	0.040
Gängörödel	R-209 1/2" x 1/8" EN 1.4404	0.045
Gängörödel	R-209 1/2" x 3/8" EN 1.4404	0.050
Gängörödel	R-209 1/4" x 1/8" EN 1.4404	0.020

Product Name	Article Number	Mass in kg
Gängörödel	R-209 2 x 1/2" EN 1.4404	0.479
Gängörödel	R-209 2 1/2" x 2" EN 1.4404	0.815
Gängörödel	R-209 2" x 1 1/2" EN 1.4404	0.480
Gängörödel	R-209 2" x 1 1/4" EN 1.4404	0.500
Gängörödel	R-209 2" x 1" EN 1.4404	0.495
Gängörödel	R-209 3" x 2 1/2" EN 1.4404	0.925
Gängörödel	R-209 3" x 2" EN 1.4404	1.080
Gängörödel	R-209 3/4" x 1/2" EN 1.4404	0.089
Gängörödel	R-209 3/4" x 1/4" EN 1.4404	0.070
Gängörödel	R-209 3/4" x 3/8" EN 1.4404	0.080
Gängörödel	R-209 3/8" x 1/4" EN 1.4404	0.030
Gängörödel	R-209 3/8" x 1/8" EN 1.4404	0.025
Gängörödel	R-209 Förm. sexkantnippel 1/2 x 1/4	0.040
Gängörödel	R-209 Förm. sexkantnippel 1/2 x 1/8	0.050
Gängörödel	R-209 Förm. sexkantnippel 1/2x 3/8	0.050
Gängörödel	R-209 Förm. sexkantnippel 1/4x 1/8	0.020
Gängörödel	R-209 Förm. sexkantnippel 3/8 x 1/4	0.030
Gängörödel	R-209 Förm.sexkantnippel 1 x 1/4	0.110
Gängörödel	R-209 Förm.sexkantnippel 1.1/2 x 1/2	0.280
Gängörödel	R-209 Förm.sexkantnippel 1.1/2x 3/4	0.280
Gängörödel	R-209 Förm.sexkantnippel 3/8x 1/8	0.030
Gängörödel	R-211 1 1/2" x 1 1/4" EN1.4404	0.141
Gängörödel	R-211 1 1/2" x 1" EN 1.4404	0.260
Gängörödel	R-211 1 1/2" x 1/2" EN 1.4404	0.350
Gängörödel	R-211 1 1/2" x 3/4" EN 1.4404	0.355
Gängörödel	R-211 1 1/4" x 1" EN 1.4404	0.125
Gängörödel	R-211 1 1/4" x 1/2" EN 1.4404	0.295
Gängörödel	R-211 1 1/4" x 3/4" EN 1.4404	0.185
Gängörödel	R-211 1" x 1/2" EN 1.4404	0.115
Gängörödel	R-211 1" x 1/4" EN 1.4404	0.150
Gängörödel	R-211 1" x 3/4" EN 1.4404	0.070

Product Name	Article Number	Mass in kg
Gängörödel	R-211 1" x 3/8" EN 1.4404	0.145
Gängörödel	R-211 1/2" x 1/4" EN 1.4404	0.040
Gängörödel	R-211 1/2" x 1/8" EN 1.4404	0.045
Gängörödel	R-211 1/2" x 3/8" EN 1.4404	0.020
Gängörödel	R-211 1/4" x 1/8" EN 1.4404	0.015
Gängörödel	R-211 2 1/2" x 2" EN 1.4404	0.540
Gängörödel	R-211 2" x 1 1/2" EN 1.4404	0.395
Gängörödel	R-211 2" x 1 1/4" EN 1.4404	0.515
Gängörödel	R-211 2" x 1" EN 1.4404	0.675
Gängörödel	R-211 2" x 1/2" EN 1.4404	0.840
Gängörödel	R-211 2" x 3/4" EN 1.4404	0.774
Gängörödel	R-211 3" x 2 1/2" EN 1.4404	0.720
Gängörödel	R-211 3" x 2" EN 1.4404	1.240
Gängörödel	R-211 3/4" x 1/2" EN 1.4404	0.050
Gängörödel	R-211 3/4" x 1/4" EN 1.4404	0.090
Gängörödel	R-211 3/4" x 3/8" EN 1.4404	0.070
Gängörödel	R-211 3/8" x 1/4" EN 1.4404	0.015
Gängörödel	R-211 3/8" x 1/8" EN 1.4404	0.025
Gängörödel	R-231 1 1/2" EN 1.4404	0.250
Gängörödel	R-231 1 1/4" EN 1.4404	0.240
Gängörödel	R-231 1" EN 1.4404	0.105
Gängörödel	R-231 1/2" EN 1.4404	0.055
Gängörödel	R-231 1/4" EN 1.4404	0.010
Gängörödel	R-231 1/8" EN 1.4404	0.010
Gängörödel	R-231 2 1/2" EN 1.4404	0.740
Gängörödel	R-231 2" EN 1.4404	0.520
Gängörödel	R-231 3" EN 1.4404	0.860
Gängörödel	R-231 3/4" EN 1.4404	0.080
Gängörödel	R-231 3/8" EN 1.4404	0.025
Gängörödel	R-231 4" EN 1.4404	1.735
Gängörödel	R-232 1 1/2" EN 1.4404	0.280

Product Name	Article Number	Mass in kg
Gängördel	R-232 1 1/4" EN 1.4404	0.215
Gängördel	R-232 1" EN 1.4404	0.135
Gängördel	R-232 1/2" EN 1.4404	0.050
Gängördel	R-232 1/4" EN 1.4404	0.025
Gängördel	R-232 1/8" EN 1.4404	0.015
Gängördel	R-232 2 1/2" EN 1.4404	0.745
Gängördel	R-232 2" EN 1.4404	0.480
Gängördel	R-232 3" EN 1.4404	1.130
Gängördel	R-232 3/4" EN 1.4404	0.085
Gängördel	R-232 3/8" EN 1.4404	0.030
Gängördel	R-235 1 1/2" EN 1.4404	0.480
Gängördel	R-235 1 1/4" EN 1.4404	0.360
Gängördel	R-235 1" EN 1.4404	0.190
Gängördel	R-235 1/2" EN 1.4404	0.050
Gängördel	R-235 1/4" EN 1.4404	0.015
Gängördel	R-235 1/8" EN 1.4404	0.010
Gängördel	R-235 2 1/2" EN 1.4404	1.640
Gängördel	R-235 2" EN 1.4404	0.900
Gängördel	R-235 3" EN 1.4404	2.320
Gängördel	R-235 3/4" EN 1.4404	0.110
Gängördel	R-235 3/8" EN 1.4404	0.030
Gängördel	R-235 Propp 1 1/2" Kon gg.	0.480
Gängördel	R-235 Propp 1" Kon gg.	0.190
Gängördel	R-235 Propp 1/2" Kon gg.	0.060
Gängördel	R-235 Propp 1/8" Kon gg.	0.010
Gängördel	R-235 Propp 3/4" Kon gg.	0.110
Gängördel	R-235 Propp 3/8" Kon gg.	0.035
Gängördel	R-236 1" EN 1.4404	0.220
Gängördel	R-236 1/2" EN 1.4404	0.070
Gängördel	R-236 1/4" EN 1.4404	0.020
Gängördel	R-236 1/8" EN 1.4404	0.010

Product Name	Article Number	Mass in kg
Gängörödel	R-236 3/4" EN 1.4404	0.115
Gängörödel	R-236 3/8" EN 1.4404	0.035
Gängörödel	R-237 1 1/2" EN 1.4404	0.415
Gängörödel	R-237 1 1/4" EN 1.4404	0.295
Gängörödel	R-237 1" EN 1.4404	0.150
Gängörödel	R-237 1/4" EN 1.4404	0.022
Gängörödel	R-237 2 1/2" EN 1.4404	1.230
Gängörödel	R-237 2" EN 1.4404	0.660
Gängörödel	R-237 3" EN 1.4404	1.650
Gängörödel	R-238 1 1/2" EN 1.4404	0.385
Gängörödel	R-238 1 1/4" EN 1.4404	0.294
Gängörödel	R-238 1" EN 1.4404	0.160
Gängörödel	R-238 1/2" EN 1.4404	0.040
Gängörödel	R-238 1/4" EN 1.4404	0.015
Gängörödel	R-238 1/8" EN 1.4404	0.005
Gängörödel	R-238 2 1/2" EN 1.4404	1.170
Gängörödel	R-238 2" EN 1.4404	0.685
Gängörödel	R-238 3" EN 1.4404	1.735
Gängörödel	R-238 3/4" EN 1.4404	0.090
Gängörödel	R-238 3/8" EN 1.4404	0.030
Gängörödel	Sexkantnippel 1/2" NPT R-207	0.050
Gängörödel	Sexkantnippel 2" NPT R-207	0.430
Gängörödel	Sexkantnippel 3/8" NPT R-207	0.035
Gängörödel	Sexkantnippel NPT1/2xR1/2	0.047
Gängörödel	Sexkantnippel NPT2xR2	0.430
Gängörödel	Sexkantnippel, svets NPT 1/2	0.040
Gängörödel	Slangkoppling NPT 1/4" X 10	0.018
Gängörödel	Slangkoppling NPT 3/8" X 10	0.030
Gängörödel	Slangkoppling, 6-k NPT 1 " X 32	0.160
Gängörödel	Union-L Hylsa 104 x 2 1.4404	0.445
Gängörödel	Union-L Hylsa 108 x 4 1.4404	0.510

Product Name	Article Number	Mass in kg
Gängörödel	Union-L Hylsa 114,3x3,6 1.4404	0.650
Gängörödel	Union-L Hylsa 139,7x3,6 1.4404	0.748
Gängörödel	Union-L Hylsa 154 x 2 1.4404	0.892
Gängörödel	Union-L Hylsa 159 x 4,5 1.4404	0.910
Gängörödel	Union-L Hylsa 168,3 x 4 1.4404	1.010
Gängörödel	Union-L Hylsa 205 x 2,5 1.4404	3.253
Gängörödel	Union-L Hylsa 219,1x3,6 1.4404	1.635
Gängörödel	Union-L Hylsa 255 x 2,5 1.4404	2.345
Gängörödel	Union-L Hylsa 26,9x2.3 1.4404	0.055
Gängörödel	Union-L Hylsa 26,9x2.3 1.4462	0.055
Gängörödel	Union-L Hylsa 30 x 2 1.4404	0.064
Gängörödel	Union-L Hylsa 33,7x2.6 1.4404	0.080
Gängörödel	Union-L Hylsa 33,7x2.6 1.4462	0.080
Gängörödel	Union-L Hylsa 42,4x2,6 1.4404	0.127
Gängörödel	Union-L Hylsa 42,4x2,6 1.4462	0.127
Gängörödel	Union-L Hylsa 44,5x2,9 1.4404	0.133
Gängörödel	Union-L Hylsa 48,3x2,6 1.4404	0.185
Gängörödel	Union-L Hylsa 48,3x2,6 1.4462	0.185
Gängörödel	Union-L Hylsa 54 x 2 1.4404	0.258
Gängörödel	Union-L Hylsa 57x2,9 1.4404	0.285
Gängörödel	Union-L Hylsa 60,3x2,9 1.4404	0.250
Gängörödel	Union-L Hylsa 60,3x2,9 1.4462	0.286
Gängörödel	Union-L Hylsa 76,1x2,9 1.4404	0.355
Gängörödel	Union-L Hylsa 84 x 2 1.4404	0.285
Gängörödel	Union-L Hylsa 88,9x3,6 1.4404	0.302

Content declaration

Product Components	Mass, kg	Post-consumer recycled material, mass-% of products	Biogenic material, mass-% of product	Biogenic material, kg C / declared unit
Stainless steel	1,00E+00	95,00%	0,00%	0,00E+00
Total	1,00E+00	95,00%	0,00%	0,00E+00

Packaging Materials	Mass, kg	Mass-% (versus the product)	Biogenic material kg C/declared unit
Paper	1,08E-02	1,08%	4,32E-03
Engineered Wood Products	3,30E-03	0,33%	1,94E-03
Plastic	3,00E-04	0,03%	0,00E+00
Wood	1,90E-03	0,19%	8,46E-04
Total	1,63E-02	1,63%	7,11E-03

Note: Some totals may not correspond exactly to the sum of separate figures due to rounding. The content declaration shows the material used and the weighted average packaging per kg product between all included articles.

Dangerous substances from the candidate list of SVHC for Authorisation	EC No.	CAS No.	Weight-% per functional or declared unit
No hazardous materials			

At the date of issue of this declaration, there is no "Substance of Very High Concern" (SVHC) in concentration above 0.1% by weight, and neither does the packaging, following the European REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals)

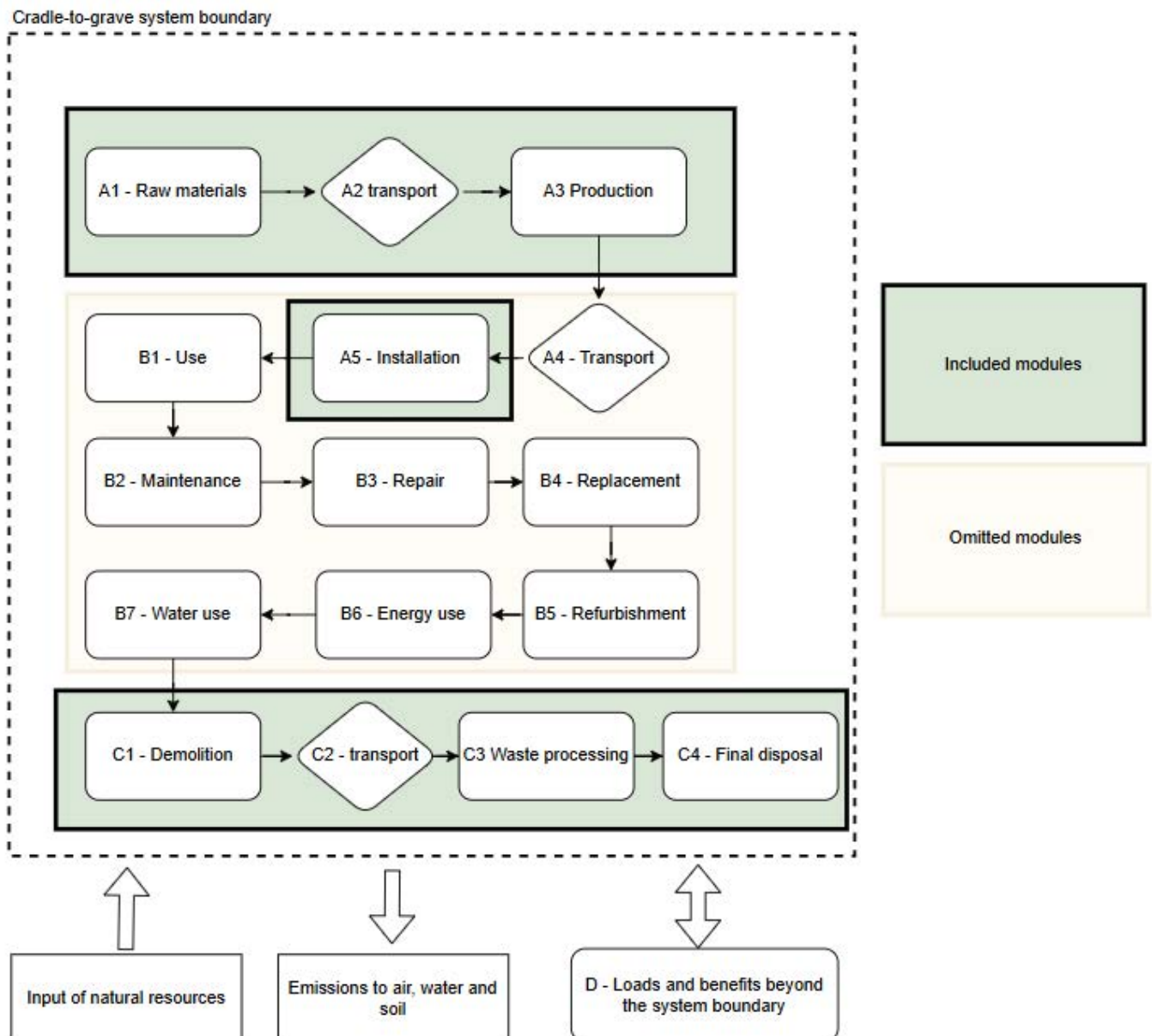
LCA information

Field	Value
Declared Unit	kg
Conversion Factor to Mass	1
Time Representativeness	Data obtained refers to the year 2024
Geographical Scope	Europe
System Boundary	The system boundaries are set to be "cradle to gate with options" with the modules A1-A3, A5, C1, C2, C3, C4, D
Excluded Modules	A4, B1, B2, B3, B4, B5, B6, B7
Database(s) and LCA Software Used	Ecoinvent 3.11 EN 15804 and EandoX version 1.01
Reference Service Life (RSL)	N/A
Characterisation Factors Used	The characterization factors used in this study refer to PCR 2019:14 and EN 15804+A2 (based on EF 3.1).
Allocation Procedures Used	Economic allocation based on product revenue
Cut-off criteria	The cut-off criteria are in accordance with the EN 15804 standard, meaning that max 1% of the renewable and non-renewable primary energy use and max 1% of the total mass input of a specific unit process are allowed to be cut-off (excluded). Particular care should be taken to include material and energy flows known to have the potential to cause significant emissions into air and water or soil related to the environmental indicators of EN 15804+A2.

Energy Breakdown - Electricity used in the manufacturing

Energy Source	Data Source	Year	Geography	GWP excl. biogenic [kg CO ₂ -eq/kWh]
Swedish average hydropower (20% reservoir non alpine + 80% run of river)	Ecoinvent 3.11	2024	SE	1,38E-02
Electricity from Wind Power	Ecoinvent 3.11	2024	NON-EU	3,66E-02
Estonian renewable energy mix	Ecoinvent 3.11	2024	EE	6,07E-02

System diagram



A1	A2	A3	A4	A5	B1-7	C1-4
Extraction and processing of raw materials	Transport of raw materials	Manufacturing	Transport to end user	Installation on site	User	End of life
						
		Waste		Waste		Waste

D Benefits and loads beyond the system boundary

A1	Raw material supply	This module considers the extraction and processing of all raw materials, energy, and transportation which occur upstream to the studied manufacturing process, including packaging material.
A2	Transport to the manufacturer	The raw materials are transported to the manufacturing site.
A3	Manufacturing	This module includes all resources used to produce and waste produced. This also includes additives and packaging material. Used electricity in A3 is based on contractual mixes.
A4	Transport	Module not declared
A5	Construction installation	This module covers the management, transport, and treatment of any installation waste or packaging residues at the construction site
B1-B7	Use stage	Module not declared
C1	Deconstruction/Demolition	This stage includes the de-construction and/or demolition of the building.
C2	Transport	This stage represents the transport distance to the waste processing facility.
C3	Waste processing	This stage includes any waste treatment needed.
C4	Final disposal	This includes any material that is landfilled.
D	Benefits	Emission credits obtained from energy recovery and/or recycling materials.

System boundaries

	Product stage				Assembly stage	Use stage							End of life stage				Benefits & loads beyond system boundary
	Raw material supply	Transport to manufacturer	Manufacturing	Transport to building site	Installation into building	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Demolition	Transport to waste processing	Waste processing for reuse, recovery, recycling	Disposal	Reuse, recovery, recycling potential
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Declared	X	X	X	ND	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU	EU	EU	-	EU	-	-	-	-	-	-	-	EU	EU	EU	EU	EU
Specific data used	19,09%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation-Products	+74% / -0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation-Sites	+24% / -12%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

X - declared, ND - Not Declared

The results presented for modules A1-A3 alone shall not be used for comparisons unless all relevant life cycle stages, particularly end-of-life (C1-C4), are included. This ensures a more accurate and representative environmental impact assessment over the full product life cycle.

Declaration of data sources, reference years, and share of primary data

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Manufacturing of product	Collected data, database	ecoinvent 3.11	2023-2024	Primary data, secondary data	19,09%
Transportation of raw materials to manufacturing site	Database	ecoinvent 3.11	2024	Secondary data	0,00%
Production of raw materials and components	Database	ecoinvent 3.11	2024	Secondary data	0,00%
Production of packaging	Database	ecoinvent 3.11	2022-2024	Secondary data	0,00%
Total share of primary data, of GWP-GHG results A1-A3					19,09%

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

Precision: The foreground precision is regarded as high as annual averages have been used.

Completeness: All known flows are accounted or listed in the cut-off.

Representativeness: The data has been chosen to specifically reflect the true conditions; it is not within the scope of the project to verify the upstream value chain but the chosen datasets should reflect this as accurately as possible within the scope of the project.

Consistency: The same methodology has been uniformly used (100% cut-off system library with only economic allocation).

Reproducibility: The LCA is reproducible with all data reported in this report.

Data sources: Data collection method is described in the LCI chapter of the LCA report and all datasets are referenced.

Infrastructure is included in the background secondary data but excluded from foreground data.

End-of-life (C1-C4)

Scenario information	Unit (expressed per declared unit)
C1: Collection process specified by type	1,00E+00 kg demolition/deconstruction of steel, wood and other materials. Energy carrier: Diesel. Quantity: 1,1 kWh/tonne
C2: Waste transport specified by type	1,00E+00 kg materials not to be incinerated transported for 80 km 0,00E+00 kg materials to be incinerated transported for 130 km
C3: Recovery system specified by type	8,50E-01 kg Metal for recycling
C4: Disposal specified by type	1,50E-01 kg Metal for final disposal
Assumptions for scenario development, e.g. transportation	The transportation is modelled with the same specifications as the truck transportation in module A4, except the transportation distance is assumed to be 80 km for materials not to be incinerated and 130 km for materials to be incinerated.

Reuse-Recovery-Recycling-potential (D)

Scenario information
The environmental loads and benefits recorded in Module D are based on the specific quantities of materials defined in the bill of materials. This accounting reflects the product's recovery potential at its end-of-life, where the recycling of materials is assumed to displace the future production of virgin materials, thereby reducing the long-term impact of raw material extraction. In this EPD, module D includes the recycling of stainless steel from module C3.

Environmental performance

Potential environmental impact – indicators according to EN 15804+A2

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. The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3).

Results per declared unit: kg								
Indicator	Unit	A1-A3	A5	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	3,46E+00	2,75E-02	3,99E-04	1,52E-02	4,04E-02	9,40E-04	1,00E-01
GWP-fossil	kg CO2 eq	3,42E+00	1,40E-03	3,99E-04	1,52E-02	2,99E-02	9,39E-04	9,99E-02
GWP-biogenic	kg CO2 eq	-1,40E-02	2,61E-02	4,43E-08	3,21E-06	1,05E-02	3,98E-07	1,86E-06
GWP-luluc	kg CO2 eq	5,27E-02	3,36E-07	4,08E-08	5,04E-06	1,94E-05	5,34E-07	6,48E-05
ODP	kg CFC11 eq	8,40E-08	1,47E-11	5,92E-12	3,32E-10	3,31E-10	2,61E-11	1,45E-09
AP	mol H+ eq	2,35E-02	5,54E-06	3,56E-06	4,89E-05	1,33E-04	6,57E-06	4,68E-04
EP-freshwater	kg P eq	2,15E-03	1,78E-07	1,28E-08	1,04E-06	8,81E-06	8,22E-08	7,20E-05
EP-marine	kg N eq	6,85E-03	2,81E-06	1,66E-06	1,66E-05	8,85E-05	2,52E-06	1,03E-04
EP-terrestrial	mol N eq	7,48E-02	2,48E-05	1,82E-05	1,79E-04	4,28E-04	2,76E-05	1,12E-03
POCP	kg NMVOC eq	2,53E-02	7,01E-06	5,43E-06	7,41E-05	1,33E-04	9,95E-06	3,62E-04
ADP-minerals & metals ¹	kg Sb-Eq	1,69E-04	2,93E-09	1,47E-10	5,13E-08	3,81E-07	1,41E-09	5,77E-06
ADP-fossil ¹	MJ	5,56E+01	9,81E-03	5,25E-03	2,16E-01	2,81E-01	2,32E-02	1,40E+00
WDP ¹	m ³	3,60E+00	6,23E-04	1,34E-05	1,16E-03	5,58E-03	1,01E-03	6,72E-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							

¹The 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.

Use of resources

Option A has been selected in calculating the primary energy indicators. Under this option, the energy is recorded as an input in the module where it enters the product system (A1–A3) and as an equivalent output in the module where it exits the system (A5 for packaging content and C3 and/or C4 for product content), whether it is transferred to another product system or treated as waste.

Results per declared unit: kg								
Indicator	Unit	A1-A3	A5	C1	C2	C3	C4	D
PERE	MJ	8,68E+01	2,22E-01	3,24E-05	8,35E-02	2,87E-02	2,12E-04	0,00E+00
PERM	MJ	2,19E-01	-2,19E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	8,70E+01	2,60E-03	3,24E-05	8,35E-02	2,87E-02	2,12E-04	0,00E+00
PENRE	MJ	4,49E+01	2,09E-02	5,25E-03	2,96E-01	2,81E-01	2,32E-02	0,00E+00
PENRM	MJ	9,00E-03	-9,00E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,50E+01	1,19E-02	5,25E-03	2,96E-01	2,81E-01	2,32E-02	0,00E+00
SM	kg	9,50E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,03E-01
RSF	MJ	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
FW	m ³	7,87E-02	2,38E-06	1,28E-08	2,69E-05	2,60E-06	2,52E-08	1,40E-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							

Additional mandatory and voluntary impact category indicators

Results per declared unit: kg								
Indicator	Unit	A1-A3	A5	C1	C2	C3	C4	D
GWP-GHG	kg CO ₂ eq	3,49E+00	1,41E-03	3,99E-04	1,52E-02	4,04E-02	9,40E-04	1,00E-01
PM	Disease incidence	5,29E-07	6,00E-11	1,02E-10	9,86E-10	2,10E-09	1,51E-10	4,80E-09
IRP ²	kBq U235 eq.	3,22E-01	4,44E-05	2,21E-06	2,58E-04	2,32E-03	1,38E-05	9,18E-03
ETP-fw ¹	CTUe	2,43E+01	7,51E-03	2,81E-04	2,84E-02	2,25E-01	1,66E-03	7,51E-01
HTP-c ¹	CTUh	8,46E-09	9,63E-13	4,07E-14	2,74E-12	1,74E-11	1,70E-13	2,80E-10
HTP-nc ¹	CTUh	8,53E-08	4,10E-11	6,41E-13	1,17E-10	5,75E-10	3,83E-12	1,80E-09
SQP ¹	Dimensionless	1,83E+02	4,72E-03	3,44E-04	1,28E-01	8,46E-01	4,52E-02	5,29E-01
Acronyms	GWP-GHG: global warming potential - greenhouse gases; PM: particulate matter; IRP: ionizing radiation potential; ETP-fw: ecotoxicity potential - freshwater; HTP-c: human toxicity potential - cancer; HTP-nc: human toxicity potential - non-cancer; SQP: smog formation potential							

The GWP-GHG indicator is identical to GWP-total except that the characterisation factor (CF) for biogenic CO₂ is set to zero. This means that the uptake and emissions of biogenic CO₂ are “balanced out” already in modules A1 and A3, instead of in modules A5 (for packaging) or modules C3 and/or C4 (for the product). The results over the entire product life cycle, from module A to C, are thus identical for GWP-GHG and GWP-total unless some of the uptake of biogenic CO₂ is released as another greenhouse gas (e.g., CH₄). In the context of Norwegian public procurement legislation, GWP-GHG is also referred to as GWP-IOBC.

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.

² 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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Waste indicators

Results per declared unit: kg								
Indicator	Unit	A1-A3	A5	C1	C2	C3	C4	D
HWD	kg	5,25E+00	2,66E-03	9,46E-04	2,18E-04	2,03E-01	3,58E-02	7,92E-02
NHWD	kg	1,30E+01	6,19E-05	3,06E-03	2,34E-03	0,00E+00	1,14E-01	8,77E-02
RWD	kg	7,12E-06	9,31E-09	5,43E-10	0,00E+00	5,95E-07	3,35E-09	8,54E-10
Acronyms	HW: Hazardous waste disposed; NHW: Non-hazardous waste disposed; RW: Radioactive waste disposed							

Output flow indicators

Results per declared unit: kg								
Indicator	Unit	A1-A3	A5	C1	C2	C3	C4	D
CRU	kg	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	0,00E+00	0,00E+00	8,50E-01	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
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Acronyms	CRU: Components for reuse; MFR: Materials for recycling; MER: Materials for energy recovery; EEE: Exported electric energy; EET: Exported thermal energy							

Information on biogenic carbon content

Parameter	Unit	Value
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in the accompanying packaging	kg C	7,11E-03

Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO₂

Environmental impact performance from 100% scenarios

Potential environmental impact – indicators according to EN 15804+A2

Results per declared unit: kg													
Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
GWP-total	kg CO ₂ eq	1,52E-02	2,47E-02	1,52E-02	4,75E-02	0,00E+00	0,00E+00	0,00E+00	1,86E-02	6,26E-03	-5,00E-02	9,68E-01	9,50E-01
GWP-fossil	kg CO ₂ eq	1,52E-02	2,47E-02	1,52E-02	3,52E-02	0,00E+00	0,00E+00	0,00E+00	1,86E-02	6,26E-03	-5,00E-02	9,68E-01	9,49E-01
GWP-biogenic	kg CO ₂ eq	3,21E-06	5,21E-06	3,21E-06	1,23E-02	0,00E+00	0,00E+00	0,00E+00	2,61E-05	2,66E-06	-9,30E-07	1,77E-05	1,77E-05
GWP-luluc	kg CO ₂ eq	5,04E-06	8,19E-06	5,04E-06	2,28E-05	0,00E+00	0,00E+00	0,00E+00	3,55E-05	3,56E-06	-3,24E-05	6,51E-04	6,16E-04
ODP	kg CFC-11 eq	3,32E-10	5,39E-10	3,32E-10	3,89E-10	0,00E+00	0,00E+00	0,00E+00	3,13E-10	1,74E-10	-7,27E-10	1,41E-08	1,38E-08
AP	mole H ⁺ eq	4,89E-05	7,94E-05	4,89E-05	1,56E-04	0,00E+00	0,00E+00	0,00E+00	1,06E-04	4,38E-05	-2,34E-04	4,55E-03	4,44E-03
EP-freshwater	kg P eq	1,04E-06	1,69E-06	1,04E-06	1,04E-05	0,00E+00	0,00E+00	0,00E+00	1,45E-05	5,48E-07	-3,60E-05	6,99E-04	6,84E-04
EP-marine	kg N eq	1,66E-05	2,69E-05	1,66E-05	1,04E-04	0,00E+00	0,00E+00	0,00E+00	4,03E-05	1,68E-05	-5,13E-05	1,01E-03	9,74E-04
EP-terrestrial	mole N eq	1,79E-04	2,91E-04	1,79E-04	5,04E-04	0,00E+00	0,00E+00	0,00E+00	4,32E-04	1,84E-04	-5,62E-04	1,11E-02	1,07E-02
POCP	kg NMVOC eq	7,41E-05	1,20E-04	7,41E-05	1,57E-04	0,00E+00	0,00E+00	0,00E+00	1,46E-04	6,63E-05	-1,81E-04	3,59E-03	3,44E-03
ADP-minerals & metals ¹	kg Sb eq	5,13E-08	8,34E-08	5,13E-08	4,48E-07	0,00E+00	0,00E+00	0,00E+00	5,54E-08	9,37E-09	-2,89E-06	5,49E-05	5,48E-05
ADP-fossil ¹	MJ	2,16E-01	3,52E-01	2,16E-01	3,31E-01	0,00E+00	0,00E+00	0,00E+00	3,00E-01	1,55E-01	-7,02E-01	1,36E+01	1,33E+01
WDP ¹	m ³	1,16E-03	1,88E-03	1,16E-03	6,57E-03	0,00E+00	0,00E+00	0,00E+00	9,04E-03	6,73E-03	-3,36E-02	6,48E-01	6,39E-01
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; RC: Recycling; INC: Incineration; LF: Landfill												

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.

Use of resources 100% scenarios

Results per declared unit: kg													
Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
PERE	MJ	8,35E-02	1,36E-01	8,35E-02	3,37E-02	0,00E+00	0,00E+00	0,00E+00	5,78E-03	1,42E-03	0,00E+00	0,00E+00	0,00E+00
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
PERT	MJ	8,35E-02	1,36E-01	8,35E-02	3,37E-02	0,00E+00	0,00E+00	0,00E+00	5,78E-03	1,42E-03	0,00E+00	0,00E+00	0,00E+00
PENRE	MJ	2,96E-01	4,82E-01	2,96E-01	3,31E-01	0,00E+00	0,00E+00	0,00E+00	3,00E-01	1,55E-01	0,00E+00	0,00E+00	0,00E+00
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
PENRT	MJ	2,96E-01	4,82E-01	2,96E-01	3,31E-01	0,00E+00	0,00E+00	0,00E+00	3,00E-01	1,55E-01	0,00E+00	0,00E+00	0,00E+00
SM	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	-3,80E-02	9,02E-01	9,02E-01
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
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	0,00E+00	0,00E+00	0,00E+00
FW	m3	2,69E-05	4,38E-05	2,69E-05	3,06E-06	0,00E+00	0,00E+00	0,00E+00	1,04E-06	1,68E-07	-6,99E-04	1,33E-02	1,33E-02
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; LF: Landfill; RC: Recycling; INC: Incineration												

Additional voluntary indicators 100% scenarios

Results per declared unit: kg													
Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
GWP-GHG	kg CO ₂ eq	1,52E-02	2,47E-02	1,52E-02	4,75E-02	0,00E+00	0,00E+00	0,00E+00	1,86E-02	6,26E-03	-5,00E-02	9,68E-01	9,50E-01
PM	Disease incidence	9,86E-10	1,60E-09	9,86E-10	2,46E-09	0,00E+00	0,00E+00	0,00E+00	3,36E-09	1,01E-09	-2,40E-09	4,90E-08	4,56E-08
IRP ²	kBq U235 eq.	2,58E-04	4,19E-04	2,58E-04	2,73E-03	0,00E+00	0,00E+00	0,00E+00	3,02E-04	9,17E-05	-4,59E-03	8,75E-02	8,72E-02
ETP-fw ¹	CTUe	2,84E-02	4,61E-02	2,84E-02	2,64E-01	0,00E+00	0,00E+00	0,00E+00	2,78E-01	1,11E-02	-3,76E-01	7,41E+00	7,14E+00
HTP-c ¹	CTUh	2,74E-12	4,46E-12	2,74E-12	2,04E-11	0,00E+00	0,00E+00	0,00E+00	2,21E-11	1,14E-12	-1,40E-10	2,68E-09	2,66E-09
HTP-nc ¹	CTUh	1,17E-10	1,91E-10	1,17E-10	6,77E-10	0,00E+00	0,00E+00	0,00E+00	1,84E-10	2,56E-11	-9,01E-10	1,73E-08	1,71E-08
SQP ¹	Dimensionless	1,28E-01	2,07E-01	1,28E-01	9,95E-01	0,00E+00	0,00E+00	0,00E+00	3,44E-01	3,01E-01	-2,64E-01	5,36E+00	5,02E+00
Acronyms	GWP-GHG: global warming potential - greenhouse gases; PM: particulate matter; IRP: ionizing radiation potential; ETP-fw: ecotoxicity potential - freshwater; HTP-c: human toxicity potential - cancer; HTP-nc: human toxicity potential - non-cancer; SQP: smog formation potential; LF: Landfill; RC: Recycling; INC: Incineration												

The GWP-GHG indicator is identical to GWP-total except that the characterisation factor (CF) for biogenic CO₂ is set to zero. This means that the uptake and emissions of biogenic CO₂ are “balanced out” already in modules A1 and A3, instead of in modules A5 (for packaging) or modules C3 and/or C4 (for the product). The results over the entire product life cycle, from module A to C, are thus identical for GWP-GHG and GWP-total unless some of the uptake of biogenic CO₂ is released as another greenhouse gas (e.g., CH₄). In the context of Norwegian public procurement legislation, GWP-GHG is also referred to as GWP-IOBC.

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.

² 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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Waste indicators 100% scenarios

Results per declared unit: kg													
Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
HWD	kg	2,18E-04	3,54E-04	2,18E-04	2,39E-01	0,00E+00	0,00E+00	0,00E+00	2,39E-01	2,39E-01	-3,96E-02	9,92E-01	7,53E-01
NHWD	kg	2,34E-03	3,81E-03	2,34E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,61E-01	-4,38E-02	8,33E-01	8,33E-01
RWD	kg	0,00E+00	0,00E+00	0,00E+00	7,00E-07	0,00E+00	0,00E+00	0,00E+00	7,44E-08	2,24E-08	-4,27E-10	8,25E-08	8,11E-09
Acronyms	HW: Hazardous waste disposed; NHW: Non-hazardous waste disposed; RW: Radioactive waste disposed; LF: Landfill; RC: Recycling; INC: Incineration												

Output flow indicators 100% scenarios

Results per declared unit: kg													
Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
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
MFR	kg	0,00E+00	0,00E+00	0,00E+00	1,00E+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
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
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
EET	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
Acronyms	CRU: Components for reuse; MFR: Materials for recycling; MER: Materials for energy recovery; EEE: Exported electric energy; EET: Exported thermal energy; LF: Landfill; RC: Recycling; INC: Incineration												

Impact Indicators Variation

LCA result of one declared unit product (A-C)	Unit	Min	Representative / Average	Max
GWP-total	kg CO2 eq.	0%	3,55E+00	73%
GWP-fossil	kg CO2 eq.	0%	3,47E+00	75%
GWP-GHG	kg CO2 eq.	0%	3,55E+00	73%
GWP-biogenic	kg CO2 eq.	0%	2,26E-02	72%
GWP-luluc	kg CO2 eq.	-130%	5,27E-02	0%
ODP	kg CFC-11 eq.	0%	8,47E-08	90%
AP	Mole of H+ eq.	0%	2,37E-02	79%
EP-freshwater	kg P eq.	0%	2,16E-03	32%
EP-marine	kg N eq.	0%	6,96E-03	100%
EP-terrestrial	Mole of N eq.	0%	7,54E-02	99%
POCP	kg NMVOC eq.	0%	2,55E-02	92%
ADP-M&M	kg Sb eq.	0%	1,70E-04	9%
ADP-fossil	MJ	0%	5,61E+01	53%
WDP	m ³ world equiv.	-26%	3,60E+00	0%

The difference between the products is calculated as a comparison to the included product that has the worst yield (R-143 3/8" EN 1.4404 from Saue)

Abbreviations

General Abbreviations

EN	European Norm (Standard)	EPD	Environmental Product Declaration
EF	Environmental Footprint	GPI	General Programme Instructions
ISO	International Organization for Standardization	LCA	Life Cycle Assessment
PCR	Product Category Rules	c-PCR	Complementary Product Category Rules
CEN	European Committee for Standardization	CLC	Co-location centre
CPC	Central Product Classification	GHS	Globally harmonized system of classification and labelling of chemicals
GRI	Global Reporting Initiative		

Environmental Impact Indicators (EN 15804)

GHG	Greenhouse gas	GWP	Global Warming Potential (kg CO ₂ eq.)
GWP-fossil	Global Warming Potential from fossil sources (kg CO ₂ eq.)	GWP-biogenic	Global Warming Potential from biogenic sources (kg CO ₂ eq.)
GWP-luluc	Global Warming Potential from land use and land use change (kg CO ₂ eq.)	GWP-total	Total Global Warming Potential (kg CO ₂ eq.)
GWP-GHG	Global Warming Potential for greenhouse gases (kg CO ₂ eq.)	ODP	Ozone Depletion Potential (kg CFC-11 eq.)
AP	Acidification Potential (mol H ⁺ eq.)	EP	Eutrophication Potential
EP-freshwater	Freshwater eutrophication potential (kg P eq.)	EP-marine	Marine eutrophication potential (kg N eq.)
EP-terrestrial	Terrestrial eutrophication potential (mol N eq.)	POCP	Photochemical Ozone Creation Potential (kg NMVOC eq.)
ADP	Abiotic Depletion Potential	ADP-minerals&metals	Abiotic depletion potential for non-fossil resources (kg Sb eq.)
ADP-fossil	Abiotic depletion potential for fossil resources (MJ)	WDP	Water Deprivation Potential (m ³)

Resource Use Indicators

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)
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 (m ³)

Abbreviations continued

Waste Indicators

HW Hazardous Waste (disposed) (kg)
RW Radioactive Waste (disposed) (kg)

NHW Non-Hazardous Waste (disposed) (kg)

Output Flow Indicators

CFR Components for Reuse (kg)
MER Materials for Energy Recovery (kg)
EET Exported Energy, Thermal (MJ)

MR Material for Recycling (kg)
EEE Exported Energy, Electricity (MJ)

Lifecycle Stages / Modules

A1 Raw material supply
A3 Manufacturing
A5 Construction/Installation
B2 Maintenance
B4 Replacement
B6 Operational energy use
C1 Deconstruction/Demolition
C3 Waste processing
D Reuse-Recovery-Recycling potential

A2 Transport
A4 Transport to site
B1 Use
B3 Repair
B5 Refurbishment
B7 Operational water use
C2 Transport to waste processing
C4 Disposal

Other Relevant Terms

SVHC Substances of Very High Concern
CAS No. Chemical Abstracts Service Number
kg Kilogram
NMVOC Non-Methane Volatile Organic Compounds
RC Recycling
P eq. Phosphorus Equivalents
CFC-11 eq. Chlorofluorocarbon-11 Equivalents
kg C Kilograms of Carbon
ND Not Declared
MND Module not declared

EC No. European Community Number
MJ Megajoule
m³ Cubic Meter
Sb eq. Antimony Equivalents
LF Landfill
N eq. Nitrogen Equivalents
CO₂ eq. Carbon Dioxide Equivalents
kg CO₂ eq. Kilograms of Carbon Dioxide Equivalent
INC Incineration

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Version history

2026-05-11: Original version of the EPD

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