

This appendix refers to the EPD MD-24017-EN, developed according to EN15804+A2:2019. Results in the appendix communicates LCA results in the format described in EN15804+A1:2013, in order to accommodate a need in the transition period between the two standard revisions. The appendix cannot stand alone, as the reference EPD describes the basis of the assessment.

SAERTEX-LINER® INDUSTRY 300/3

ENVIRONMENTAL IMPACTS PER [1m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	1,50E+04	1,90E+02	1,54E+03	7,73E+02	1,99E+01	0,00E+00	3,46E+03	-9,57E+02
ODP	[kg CFC11-eq.]	6,80E-08	5,59E-11	4,17E-10	2,68E-09	5,86E-12	0,00E+00	1,32E-09	-1,54E-08
AP	[kg SO ₂ -eq.]	3,67E+01	1,62E-01	9,76E+00	4,29E+00	1,70E-02	0,00E+00	1,37E+00	-7,16E-01
EP	[kg PO ₄ ³⁻ -eq.]	4,36E+00	3,37E-02	2,48E+00	7,30E-01	3,54E-03	0,00E+00	2,75E-01	-1,59E-01
POCP	[kg ethene-eq.]	4,33E+00	-1,43E-02	1,04E+00	6,47E-01	-1,50E-03	0,00E+00	8,18E-02	-7,39E-02
ADPE	[kg Sb-eq.]	3,58E-03	1,39E-05	9,07E-05	6,66E-04	1,45E-06	0,00E+00	8,46E-06	-8,67E-05
ADPF	[MJ]	3,60E+05	2,58E+03	1,69E+04	1,24E+05	2,71E+02	0,00E+00	1,51E+03	-1,33E+04
Caption	GWP = Global warming potential; ODP = Ozone depletion potential; AP = Acidification potential of soil and water; EP = Eutrophication potential; POCP = Photochemical ozone creation potential; ADPE = Abiotic depletion potential for non fossil resources; ADPF = Abiotic depletion potential for fossil resources The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

RESOURCE USE PER [1m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	[MJ]	3,54E+04	1,75E+02	1,16E+03	8,41E+03	1,84E+01	0,00E+00	5,50E+02	-5,84E+03
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
PERT	[MJ]	3,54E+04	1,75E+02	1,16E+03	8,41E+03	1,84E+01	0,00E+00	5,50E+02	-5,84E+03
PENRE	[MJ]	3,81E+05	2,62E+03	1,71E+04	1,26E+05	2,75E+02	0,00E+00	1,68E+03	-1,50E+04
PENRM	[MJ]	4,15E+04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,23E+05	2,62E+03	1,71E+04	1,26E+05	2,75E+02	0,00E+00	1,68E+03	-1,50E+04
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
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
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
FW	[m ³]	6,68E+01	1,56E-01	1,74E+00	7,49E+00	1,63E-02	0,00E+00	1,02E+01	-2,02E+00
Caption	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 resources; 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 numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

WASTE CATEGORIES AND OUTPUT FLOWS PER [1m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	[kg]	2,40E-04	4,42E-09	2,95E-08	2,12E-07	4,63E-10	0,00E+00	1,66E-08	-9,81E-07
NHWD	[kg]	5,66E+02	3,92E-01	4,92E+00	1,88E+01	4,11E-02	0,00E+00	2,06E+02	-8,12E+00
RWD	[kg]	4,61E+00	3,45E-03	2,47E-02	1,65E-01	3,61E-04	0,00E+00	5,63E-02	-5,85E-01
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
MFR	[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
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
EEE	[MJ]	3,66E+02	0,00E+00	3,66E+02	0,00E+00	0,00E+00	0,00E+00	3,18E+03	0,00E+00
EET	[MJ]	8,53E+02	0,00E+00	8,58E+02	0,00E+00	0,00E+00	0,00E+00	7,39E+03	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

SAERTEX-LINER® INDUSTRY 600/5

ENVIRONMENTAL IMPACTS PER [1m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	1,36E+04	1,53E+02	8,45E+02	2,31E+02	1,61E+01	0,00E+00	2,80E+03	-7,67E+02
ODP	[kg CFC11-eq.]	6,03E-08	4,49E-11	2,23E-10	8,03E-10	4,73E-12	0,00E+00	1,06E-09	-1,24E-08
AP	[kg SO ₂ -eq.]	3,22E+01	1,30E-01	4,90E+00	1,28E+00	1,37E-02	0,00E+00	1,10E+00	-5,74E-01
EP	[kg PO ₄ ³⁻ -eq.]	3,91E+00	2,71E-02	1,25E+00	2,19E-01	2,86E-03	0,00E+00	2,22E-01	-1,28E-01
POCP	[kg ethene-eq.]	3,85E+00	-1,15E-02	5,23E-01	1,94E-01	-1,21E-03	0,00E+00	6,61E-02	-5,92E-02
ADPE	[kg Sb-eq.]	2,80E-03	1,12E-05	4,56E-05	1,99E-04	1,17E-06	0,00E+00	6,83E-06	-6,95E-05
ADPF	[MJ]	3,28E+05	2,08E+03	8,48E+03	3,71E+04	2,18E+02	0,00E+00	1,22E+03	-1,07E+04
Caption	GWP = Global warming potential; ODP = Ozone depletion potential; AP = Acidification potential of soil and water; EP = Eutrophication potential; POCP = Photochemical ozone creation potential; ADPE = Abiotic depletion potential for non fossil resources; ADPF = Abiotic depletion potential for fossil resources								
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

RESOURCE USE PER [1m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	[MJ]	3,12E+04	1,41E+02	5,89E+02	2,52E+03	1,48E+01	0,00E+00	4,44E+02	-4,69E+03
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
PERT	[MJ]	3,12E+04	1,41E+02	5,89E+02	2,52E+03	1,48E+01	0,00E+00	4,44E+02	-4,69E+03
PENRE	[MJ]	3,47E+05	2,11E+03	8,61E+03	3,77E+04	2,22E+02	0,00E+00	1,35E+03	-1,20E+04
PENRM	[MJ]	2,62E+04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	3,74E+05	2,11E+03	8,61E+03	3,77E+04	2,22E+02	0,00E+00	1,35E+03	-1,20E+04
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
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
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
FW	[m ³]	6,01E+01	1,25E-01	1,05E+00	2,24E+00	1,32E-02	0,00E+00	8,20E+00	-1,62E+00
Caption	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 resources; 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 numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

WASTE CATEGORIES AND OUTPUT FLOWS PER [1m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	[kg]	1,47E-04	3,55E-09	1,49E-08	6,35E-08	3,74E-10	0,00E+00	1,34E-08	-7,87E-07
NHWD	[kg]	5,86E+02	3,15E-01	3,44E+00	5,63E+00	3,32E-02	0,00E+00	1,66E+02	-6,51E+00
RWD	[kg]	4,16E+00	2,77E-03	1,30E-02	4,96E-02	2,92E-04	0,00E+00	4,55E-02	-4,69E-01
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
MFR	[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
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
EEE	[MJ]	2,77E+02	0,00E+00	2,76E+02	0,00E+00	0,00E+00	0,00E+00	2,57E+03	0,00E+00
EET	[MJ]	6,46E+02	0,00E+00	6,47E+02	0,00E+00	0,00E+00	0,00E+00	5,96E+03	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy								
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

SAERTEX-LINER® INDUSTRY 1000/10

ENVIRONMENTAL IMPACTS PER [1m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	1,14E+04	1,47E+02	6,98E+02	7,72E+01	1,51E+01	0,00E+00	2,63E+03	-7,55E+02
ODP	[kg CFC11-eq.]	4,74E-08	4,33E-11	1,71E-10	2,68E-10	4,45E-12	0,00E+00	1,00E-09	-1,22E-08
AP	[kg SO ₂ -eq.]	3,17E+01	1,25E-01	3,10E+00	4,29E-01	1,29E-02	0,00E+00	1,04E+00	-5,65E-01
EP	[kg PO ₄ ³⁻ -eq.]	3,52E+00	2,62E-02	7,89E-01	7,30E-02	2,69E-03	0,00E+00	2,09E-01	-1,26E-01
POCP	[kg ethene-eq.]	3,42E+00	-1,11E-02	3,30E-01	6,47E-02	-1,14E-03	0,00E+00	6,22E-02	-5,83E-02
ADPE	[kg Sb-eq.]	3,37E-03	1,08E-05	2,89E-05	6,66E-05	1,11E-06	0,00E+00	6,43E-06	-6,84E-05
ADPF	[MJ]	2,65E+05	2,00E+03	5,37E+03	1,24E+04	2,06E+02	0,00E+00	1,15E+03	-1,05E+04
Caption	GWP = Global warming potential; ODP = Ozone depletion potential; AP = Acidification potential of soil and water; EP = Eutrophication potential; POCP = Photochemical ozone creation potential; ADPE = Abiotic depletion potential for non fossil resources; ADPF = Abiotic depletion potential for fossil resources								
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

RESOURCE USE PER [1m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	[MJ]	2,63E+04	1,36E+02	3,84E+02	8,41E+02	1,40E+01	0,00E+00	4,18E+02	-4,61E+03
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
PERT	[MJ]	2,63E+04	1,36E+02	3,84E+02	8,41E+02	1,40E+01	0,00E+00	4,18E+02	-4,61E+03
PENRE	[MJ]	2,83E+05	2,03E+03	5,46E+03	1,26E+04	2,09E+02	0,00E+00	1,28E+03	-1,18E+04
PENRM	[MJ]	1,50E+04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	2,98E+05	2,03E+03	5,46E+03	1,26E+04	2,09E+02	0,00E+00	1,28E+03	-1,18E+04
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
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
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
FW	[m ³]	5,13E+01	1,21E-01	1,06E+00	7,49E-01	1,24E-02	0,00E+00	7,72E+00	-1,59E+00
Caption	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 resources; 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 numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

WASTE CATEGORIES AND OUTPUT FLOWS PER [1m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	[kg]	8,04E-05	3,42E-09	9,71E-09	2,12E-08	3,52E-10	0,00E+00	1,26E-08	-7,74E-07
NHWD	[kg]	5,55E+02	3,04E-01	3,95E+00	1,88E+00	3,12E-02	0,00E+00	1,57E+02	-6,41E+00
RWD	[kg]	3,35E+00	2,67E-03	9,50E-03	1,65E-02	2,75E-04	0,00E+00	4,28E-02	-4,61E-01
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
MFR	[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
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
EEE	[MJ]	2,10E+02	0,00E+00	3,78E+02	0,00E+00	0,00E+00	0,00E+00	2,42E+03	0,00E+00
EET	[MJ]	4,90E+02	0,00E+00	8,86E+02	0,00E+00	0,00E+00	0,00E+00	5,62E+03	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy								
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

Checked and approved by



Kim Christiansen
Third party verifier of MD-24017-EN



Martha Katrine Sørensen
EPD Danmark