

This appendix refers to the EPD MD-24015-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® MULTI 600/5

ENVIRONMENTAL IMPACTS PER [1 m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	5,72E+03	1,54E+02	8,45E+02	2,31E+02	1,63E+01	0,00E+00	2,83E+03	-7,76E+02
ODP	[kg CFC111-eq.]	2,64E-07	4,54E-11	2,23E-10	8,03E-10	4,79E-12	0,00E+00	1,08E-09	-1,25E-08
AP	[kg SO ₂ -eq.]	2,20E+01	1,32E-01	4,90E+00	1,28E+00	1,39E-02	0,00E+00	1,12E+00	-5,81E-01
EP	[kg PO ₄ ³⁻ -eq.]	1,86E+00	2,74E-02	1,25E+00	2,19E-01	2,89E-03	0,00E+00	2,24E-01	-1,29E-01
POCP	[kg ethene-eq.]	2,64E+00	-1,16E-02	5,23E-01	1,94E-01	-1,22E-03	0,00E+00	6,69E-02	-5,99E-02
ADPE	[kg Sb-eq.]	2,42E-03	1,13E-05	4,56E-05	1,99E-04	1,19E-06	0,00E+00	6,91E-06	-7,03E-05
ADPF	[MJ]	1,10E+05	2,10E+03	8,48E+03	3,71E+04	2,21E+02	0,00E+00	1,24E+03	-1,08E+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 [1 m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	[MJ]	1,20E+04	1,43E+02	5,89E+02	2,52E+03	1,50E+01	0,00E+00	4,50E+02	-4,74E+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]	1,20E+04	1,43E+02	5,89E+02	2,52E+03	1,50E+01	0,00E+00	4,50E+02	-4,74E+03
PENRE	[MJ]	1,17E+05	2,13E+03	8,61E+03	3,77E+04	2,24E+02	0,00E+00	1,37E+03	-1,21E+04
PENRM	[MJ]	2,69E+04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	1,44E+05	2,13E+03	8,61E+03	3,77E+04	2,24E+02	0,00E+00	1,37E+03	-1,21E+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]	2,61E+01	1,27E-01	1,05E+00	2,24E+00	1,34E-02	0,00E+00	8,30E+00	-1,64E+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								
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WASTE CATEGORIES AND OUTPUT FLOWS PER [1 m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	[kg]	1,36E-04	3,59E-09	1,49E-08	6,35E-08	3,78E-10	0,00E+00	1,36E-08	-7,95E-07
NHWD	[kg]	5,69E+02	3,19E-01	3,44E+00	5,63E+00	3,36E-02	0,00E+00	1,68E+02	-6,59E+00
RWD	[kg]	1,15E+00	2,80E-03	1,30E-02	4,96E-02	2,95E-04	0,00E+00	4,60E-02	-4,74E-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]	3,88E+02	0,00E+00	2,76E+02	0,00E+00	0,00E+00	0,00E+00	2,60E+03	0,00E+00
EET	[MJ]	9,02E+02	0,00E+00	6,47E+02	0,00E+00	0,00E+00	0,00E+00	6,04E+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® MULTI 800/10

ENVIRONMENTAL IMPACTS PER [1 m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	5,49E+03	1,45E+02	6,66E+02	9,68E+01	1,50E+01	0,00E+00	2,62E+03	-7,36E+02
ODP	[kg CFC11-eq.]	3,39E-07	4,26E-11	1,67E-10	3,36E-10	4,43E-12	0,00E+00	9,96E-10	-1,19E-08
AP	[kg SO ₂ -eq.]	2,38E+01	1,23E-01	3,20E+00	5,37E-01	1,28E-02	0,00E+00	1,03E+00	-5,51E-01
EP	[kg PO ₄ ³⁻ -eq.]	1,93E+00	2,57E-02	8,13E-01	9,15E-02	2,67E-03	0,00E+00	2,07E-01	-1,22E-01
POCP	[kg ethene-eq.]	2,66E+00	-1,09E-02	3,40E-01	8,11E-02	-1,13E-03	0,00E+00	6,18E-02	-5,68E-02
ADPE	[kg Sb-eq.]	2,74E-03	1,06E-05	2,98E-05	8,34E-05	1,10E-06	0,00E+00	6,39E-06	-6,67E-05
ADPF	[MJ]	1,01E+05	1,97E+03	5,53E+03	1,55E+04	2,05E+02	0,00E+00	1,14E+03	-1,02E+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								
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RESOURCE USE PER [1 m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	[MJ]	1,11E+04	1,34E+02	3,92E+02	1,05E+03	1,39E+01	0,00E+00	4,16E+02	-4,49E+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]	1,11E+04	1,34E+02	3,92E+02	1,05E+03	1,39E+01	0,00E+00	4,16E+02	-4,49E+03
PENRE	[MJ]	1,09E+05	2,00E+03	5,62E+03	1,58E+04	2,08E+02	0,00E+00	1,27E+03	-1,15E+04
PENRM	[MJ]	1,19E+05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	2,28E+05	2,00E+03	5,62E+03	1,58E+04	2,08E+02	0,00E+00	1,27E+03	-1,15E+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]	2,57E+01	1,19E-01	9,65E-01	9,38E-01	1,24E-02	0,00E+00	7,68E+00	-1,55E+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								
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WASTE CATEGORIES AND OUTPUT FLOWS PER [1 m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	[kg]	7,22E-05	3,37E-09	9,92E-09	2,66E-08	3,50E-10	0,00E+00	1,25E-08	-7,55E-07
NHWD	[kg]	4,88E+02	2,99E-01	3,47E+00	2,36E+00	3,11E-02	0,00E+00	1,56E+02	-6,25E+00
RWD	[kg]	1,00E+00	2,63E-03	9,38E-03	2,07E-02	2,73E-04	0,00E+00	4,26E-02	-4,50E-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]	2,78E+02	0,00E+00	3,24E+02	0,00E+00	0,00E+00	0,00E+00	2,40E+03	0,00E+00
EET	[MJ]	6,47E+02	0,00E+00	7,58E+02	0,00E+00	0,00E+00	0,00E+00	5,58E+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								
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SAERTEX-LINER® MULTI 1200/12

ENVIRONMENTAL IMPACTS PER [1 m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	5,33E+03	1,46E+02	7,61E+02	6,04E+01	1,47E+01	0,00E+00	2,57E+03	-7,64E+02
ODP	[kg CFC11-eq.]	3,36E-07	4,31E-11	1,81E-10	2,09E-10	4,34E-12	0,00E+00	9,77E-10	-1,23E-08
AP	[kg SO ₂ -eq.]	2,37E+01	1,25E-01	2,99E+00	3,35E-01	1,26E-02	0,00E+00	1,01E+00	-5,72E-01
EP	[kg PO ₄ ³⁻ -eq.]	1,91E+00	2,60E-02	7,60E-01	5,71E-02	2,62E-03	0,00E+00	2,04E-01	-1,27E-01
POCP	[kg ethene-eq.]	2,63E+00	-1,10E-02	3,18E-01	5,06E-02	-1,11E-03	0,00E+00	6,07E-02	-5,90E-02
ADPE	[kg Sb-eq.]	3,66E-03	1,07E-05	2,79E-05	5,20E-05	1,08E-06	0,00E+00	6,27E-06	-6,92E-05
ADPF	[MJ]	9,92E+04	1,99E+03	5,18E+03	9,68E+03	2,01E+02	0,00E+00	1,12E+03	-1,06E+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								
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RESOURCE USE PER [1 m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	[MJ]	1,17E+04	1,35E+02	3,75E+02	6,57E+02	1,36E+01	0,00E+00	4,08E+02	-4,67E+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]	1,17E+04	1,35E+02	3,75E+02	6,57E+02	1,36E+01	0,00E+00	4,08E+02	-4,67E+03
PENRE	[MJ]	1,07E+05	2,02E+03	5,26E+03	9,82E+03	2,04E+02	0,00E+00	1,24E+03	-1,20E+04
PENRM	[MJ]	1,21E+04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	1,19E+05	2,02E+03	5,26E+03	9,82E+03	2,04E+02	0,00E+00	1,24E+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]	2,53E+01	1,20E-01	1,24E+00	5,85E-01	1,21E-02	0,00E+00	7,53E+00	-1,61E+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								
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WASTE CATEGORIES AND OUTPUT FLOWS PER [1 m ³]									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	[kg]	6,08E-05	3,41E-09	9,53E-09	1,66E-08	3,43E-10	0,00E+00	1,23E-08	-7,84E-07
NHWD	[kg]	4,85E+02	3,03E-01	4,67E+00	1,47E+00	3,05E-02	0,00E+00	1,53E+02	-6,49E+00
RWD	[kg]	9,85E-01	2,66E-03	9,83E-03	1,29E-02	2,68E-04	0,00E+00	4,17E-02	-4,67E-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]	2,61E+02	0,00E+00	4,75E+02	0,00E+00	0,00E+00	0,00E+00	2,36E+03	0,00E+00
EET	[MJ]	6,07E+02	0,00E+00	1,11E+03	0,00E+00	0,00E+00	0,00E+00	5,48E+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								
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Checked and approved by



Kim Christiansen
Third party verifier of MD-24015-EN



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