

This appendix refers to the EPD MD-21034-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.

Product 1: Søuld Acoustic Mats – Flameretardant

ENVIRONMENTAL IMPACTS PER 1 KG SØULD ACOUSTIC MATS							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	-3.94E-01	0.00E+00	2.25E-03	1.44E+00	0.00E+00	-3.08E-01
ODP	[kg CFC11-eq.]	7.11E-11	0.00E+00	5.59E-19	3.17E-16	0.00E+00	-7.17E-15
AP	[kg SO ₂ -eq.]	2.12E-03	0.00E+00	1.96E-06	2.11E-04	0.00E+00	-6.88E-04
EP	[kg PO ₄ ³⁻ -eq.]	1.08E-04	0.00E+00	3.65E-07	4.57E-05	0.00E+00	-1.46E-04
POCP	[kg ethene-eq.]	1.59E-04	0.00E+00	-2.75E-08	1.66E-05	0.00E+00	-7.63E-05
ADPE	[kg Sb-eq.]	1.10E-05	0.00E+00	1.85E-10	3.88E-09	0.00E+00	-1.15E-07
ADPF	[MJ]	1.31E+01	0.00E+00	3.05E-02	3.64E-01	0.00E+00	-3.36E+00
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						

RESOURCE USE PER 1 KG SØULD ACOUSTIC MATS							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	6.35E+00	0.00E+00	1.76E-03	7.68E-02	0.00E+00	-7.14E+00
PERM	[MJ]	1.04E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	[MJ]	1.67E+01	0.00E+00	1.76E-03	7.68E-02	0.00E+00	-7.14E+00
PENRE	[MJ]	7.46E+00	0.00E+00	3.06E-02	4.22E-01	0.00E+00	-3.69E+00
PENRM	[MJ]	6.67E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	[MJ]	1.41E+01	0.00E+00	3.06E-02	4.22E-01	0.00E+00	-3.69E+00
SM	[kg]	1.09E-01	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
NRSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	[m ³]	2.57E-03	0.00E+00	2.05E-06	4.50E-03	0.00E+00	-2.22E-03
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						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 KG SØULD ACOUSTIC MATS							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	6.15E-08	0.00E+00	1.42E-09	5.70E-10	0.00E+00	-1.69E-08
NHWD	[kg]	3.45E-01	0.00E+00	4.85E-06	3.76E-02	0.00E+00	-1.12E-02
RWD	[kg]	2.16E-04	0.00E+00	5.64E-08	2.29E-05	0.00E+00	-1.32E-04
CRU	[kg]	5.00E-03	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
MER	[kg]	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	2.35E+00	0.00E+00	0.00E+00
EET	[MJ]	0.00E+00	0.00E+00	0.00E+00	4.33E+00	0.00E+00	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						

Product 2: Søuld Acoustic Mats – Non-Flameretardant

ENVIRONMENTAL IMPACTS PER 1 KG SØULD ACOUSTIC MATS							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	-7.68E-01	0.00E+00	2.25E-03	1.57E+00	0.00E+00	-3.42E-01
ODP	[kg CFC11-eq.]	8.37E-11	0.00E+00	5.59E-19	2.95E-16	0.00E+00	-8.02E-15
AP	[kg SO ₂ -eq.]	6.11E-04	0.00E+00	1.96E-06	1.74E-04	0.00E+00	-7.56E-04
EP	[kg PO ₄ ³⁻ -eq.]	7.97E-05	0.00E+00	3.65E-07	3.77E-05	0.00E+00	-1.61E-04
POCP	[kg ethene-eq.]	1.04E-04	0.00E+00	-2.75E-08	1.51E-05	0.00E+00	-8.37E-05
ADPE	[kg Sb-eq.]	1.49E-07	0.00E+00	1.85E-10	3.65E-09	0.00E+00	-1.28E-07
ADPF	[MJ]	1.22E+01	0.00E+00	3.05E-02	3.33E-01	0.00E+00	-3.72E+00
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						

RESOURCE USE PER 1 KG SØULD ACOUSTIC MATS							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	6.13E+00	0.00E+00	1.76E-03	7.27E-02	0.00E+00	-7.87E+00
PERM	[MJ]	1.29E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	[MJ]	1.90E+01	0.00E+00	1.76E-03	7.27E-02	0.00E+00	-7.87E+00
PENRE	[MJ]	7.04E+00	0.00E+00	3.06E-02	3.89E-01	0.00E+00	-4.08E+00
PENRM	[MJ]	5.63E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	[MJ]	1.27E+01	0.00E+00	3.06E-02	3.89E-01	0.00E+00	-4.08E+00
SM	[kg]	1.04E-01	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
NRSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	[m ³]	1.91E-03	0.00E+00	2.05E-06	4.70E-03	0.00E+00	-2.47E-03
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						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 KG SØULD ACOUSTIC MATS							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	6.07E-08	0.00E+00	1.42E-09	2.70E-10	0.00E+00	-1.85E-08
NHWD	[kg]	3.22E-02	0.00E+00	4.85E-06	1.29E-02	0.00E+00	-1.24E-02
RWD	[kg]	1.62E-04	0.00E+00	5.64E-08	2.23E-05	0.00E+00	-1.48E-04

CRU	[kg]	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
MER	[kg]	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	2.63E+00	0.00E+00	0.00E+00
EET	[MJ]	0.00E+00	0.00E+00	0.00E+00	4.71E+00	0.00E+00	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						

Checked and approved by



Ninkie Bendtsen
Third party verifier of MD-21034-EN



Henrik Fred Larsen
EPD Danmark