

This appendix refers to the EPD MD-23135-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.

Wedges, HDPE

ENVIRONMENTAL IMPACTS PER 1 kg Knudsen Kilen Wedges, HDPE										
Parameter	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO <sub>2</sub> -eq.]	1.35E+00	5.43E-01	1.21E+00	3.11E+00	0.00E+00	4.23E-03	1.35E-01	2.65E-03	-8.71E-01
ODP	[kg CFC11- eq.]	1.78E-09	8.45E-14	3.41E-10	2.12E-09	0.00E+00	6.58E-16	2.00E-09	5.44E-15	-2.37E-12
AP	[kg SO <sub>2</sub> -eq.]	2.15E-03	5.86E-04	9.87E-04	3.72E-03	0.00E+00	4.56E-06	5.33E-05	6.68E-06	-1.07E-03
EP	[kg PO <sub>4</sub> <sup>3-</sup> - eq.]	3.04E-04	1.28E-04	1.66E-04	5.99E-04	0.00E+00	1.00E-06	6.88E-04	7.62E-06	-1.53E-04
POCP	[kg ethene- eq.]	4.42E-04	-5.98E-05	1.34E-04	5.16E-04	0.00E+00	-4.66E-07	6.21E-06	6.04E-07	-3.09E-04
ADPE	[kg Sb-eq.]	2.45E-07	3.64E-08	6.74E-08	3.49E-07	0.00E+00	2.84E-10	3.42E-08	7.59E-11	-5.29E-08
ADPF	[MJ]	6.56E+01	7.39E+00	2.17E+01	9.47E+01	0.00E+00	5.76E-02	1.88E-01	3.90E-02	-4.85E+01
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 Knudsen Kilen Wedges, HDPE										
Parameter	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2.91E+00	5.47E-01	3.93E+00	7.39E+00	0.00E+00	4.26E-03	2.18E-02	3.71E-03	-2.20E+00
PERM	[MJ]	1.07E+00	0.00E+00	1.80E+00	2.86E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	[MJ]	3.98E+00	5.47E-01	5.72E+00	1.03E+01	0.00E+00	4.26E-03	2.18E-02	3.71E-03	-2.20E+00
PENRE	[MJ]	2.31E+01	7.54E+00	1.90E+01	4.97E+01	0.00E+00	5.87E-02	4.20E+01	1.78E+00	-4.80E+01
PENRM	[MJ]	4.36E+01	0.00E+00	6.50E+00	5.01E+01	0.00E+00	0.00E+00	-4.18E+01	-1.74E+00	0.00E+00
PENRT	[MJ]	6.68E+01	7.54E+00	2.55E+01	9.98E+01	0.00E+00	5.87E-02	2.08E-01	4.11E-02	-4.80E+01
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
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
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
FW	[m <sup>3</sup> ]	7.90E-03	5.99E-04	3.42E-03	1.19E-02	0.00E+00	4.66E-06	5.28E-04	4.05E-07	-3.90E-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 Knudsen Kilen Wedges, HDPE										
Parameter	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1.84E-08	2.34E-11	5.22E-09	2.37E-08	0.00E+00	1.82E-13	3.35E-13	3.46E-12	-4.09E-09
NHWD	[kg]	2.00E-02	1.15E-03	9.40E-03	3.05E-02	0.00E+00	8.96E-06	4.97E-04	3.98E-02	7.90E-02
RWD	[kg]	2.89E-04	1.41E-05	1.30E-03	1.61E-03	0.00E+00	1.10E-07	8.96E-07	4.86E-07	2.60E-04
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
MFR	[kg]	0.00E+00	0.00E+00	4.41E-02	4.41E-02	0.00E+00	0.00E+00	9.20E-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	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	7.57E-01	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	7.92E-01	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



Guangli Du  
Third party verifier of MD-xxxxx-EN



Martha Katrine Sørensen  
EPD Danmark