

This appendix refers to the EPD MD-21018-EN developed according to EN15804+A2:2019.

Results in the appendix communicates LCA results in the format described in EN15804+A1:2013 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.

**Declared product: 1 ton of geosynthetics (Hungarian production site)**

ENVIRONMENTAL IMPACTS PER TON										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
GWP	[kg CO <sub>2</sub> -eq.]	2.19E+03	9.84E+01	1.08E+02	0.00E+00	6.06E-01	8.18E+00	0.00E+00	6.61E+01	-4.91E+01
ODP	[kg CFC11-eq.]	1.22E-08	2.45E-14	3.12E-08	0.00E+00	1.52E-16	2.04E-15	0.00E+00	2.19E-13	-1.12E-12
AP	[kg SO <sub>2</sub> -eq.]	6.78E+00	2.56E-01	1.72E-02	0.00E+00	2.21E-03	2.08E-02	0.00E+00	1.78E-01	-8.65E-02
EP	[kg PO <sub>4</sub> <sup>3-</sup> -eq.]	2.00E+00	5.98E-02	3.47E-03	0.00E+00	5.14E-04	4.93E-03	0.00E+00	1.91E-01	-1.14E-02
POCP	[kg ethene-eq.]	9.21E-01	-8.67E-02	1.00E-03	0.00E+00	2.13E-04	-7.25E-03	0.00E+00	2.06E-02	-7.51E-03
ADPE	[kg Sb-eq.]	2.02E-04	8.10E-06	-3.86E-07	0.00E+00	5.02E-08	6.74E-07	0.00E+00	4.96E-06	-1.23E-05
ADPF	[MJ]	8.02E+04	1.33E+03	3.58E+01	0.00E+00	8.21E+00	1.10E+02	0.00E+00	1.00E+03	-5.41E+02
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 TON										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
PERE	[MJ]	3,97E+03	7,71E+01	6,31E+00	0,00E+00	4,78E-01	6,42E+00	0,00E+00	7,29E+01	-3,42E+02
PERM	[MJ]	6,33E+02	0,00	0,00	0,00E+00	0,00	0,00	0,00E+00	0,00	0,00E+00
PERT	[MJ]	4,60E+03	7,71E+01	6,31E+00	0,00E+00	4,78E-01	6,42E+00	0,00E+00	7,29E+01	-3,42E+02
PENRE	[MJ]	8,72E+04	1,34E+03	4,11E+01	0,00E+00	8,30E+00	1,12E+02	0,00E+00	1,04E+03	-8,04E+02
PENRM	[MJ]	4,44E+04	0,00	0,00	0,00E+00	0,00	0,00	0,00E+00	0,00	0,00E+00
PENRT	[MJ]	1,32E+05	1,34E+03	4,11E+01	0,00E+00	8,30E+00	1,12E+02	0,00E+00	1,04E+03	-8,04E+02
SM	[kg]	0,00	0,00	0,00	0,00E+00	0,00	0,00	0,00E+00	0,00	0,00E+00
RSF	[MJ]	0,00	0,00	0,00	0,00E+00	0,00	0,00	0,00E+00	0,00	0,00E+00
NRSF	[MJ]	0,00	0,00	0,00	0,00E+00	0,00	0,00	0,00E+00	0,00	0,00E+00
FW	[m <sup>3</sup> ]	3,84E+01	8,99E-02	2,94E-01	0,00E+00	5,57E-04	7,48E-03	0,00E+00	1,27E-02	-3,73E-01
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 TON										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
HWD	[kg]	1,88E-05	6,19E-05	2,41E-07	0,00E+00	3,84E-07	5,16E-06	0,00E+00	3,79E-06	-4,43E-07
NHWD	[kg]	9,56E+00	2,12E-01	5,55E+00	0,00E+00	1,32E-03	1,77E-02	0,00E+00	9,96E+02	-1,00E+00
RWD	[kg]	1,91E+00	2,47E-03	1,87E-03	0,00E+00	1,53E-05	2,06E-04	0,00E+00	1,25E-02	-1,02E-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	0,00E+00
MFR	[kg]	1,09E+1	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	6,41E+01	0,00E+00	6,41E+01	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
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
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*



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