ENVIRONMENTAL IMPACT ANALYSIS OF NATURAL CORK STOPPERS PRODUCTION

Table S1. Global environmental impact per kg of natural cork stopper, CML Methodology and comparative by size and method of manufacture.

		Natural cork stoppers			
	Size	**24x44**		**26x44**	
Impact category	**Unit**	**Punched**	**Turned**	**Punched**	**Turned (base)**
Abiotic depletion	kg Sb eq	85.61%	88.17%	90.72%	4.31E-05
Abiotic depletion (fossil fuels)	MJ	85.60%	88.80%	90.40%	1.25E+02
Global warming (GWP100a)	kg CO_2 eq	87.29%	89.83%	91.53%	1.18E+01
Ozone layer depletion (ODP)	kg CFC-11 eq	86.70%	89.51%	90.87%	1.03E-06
Human toxicity	kg 1.4-DB eq	84.96%	87.43%	89.38%	1.13E+01
Fresh water aquatic ecotox.	kg 1.4-DB eq	84.17%	86.62%	88.80%	7.77E+00
Marine aquatic ecotoxicity	kg 1.4-DB eq	85.64%	88.40%	90.06%	1.81E+04
Terrestrial ecotoxicity	kg 1.4-DB eq	82.36%	84.72%	86.98%	1.06E-01
Photochemical oxidation	kg C_2H_4 eq	85.85%	88.44%	90.33%	4.24E-03
Acidification	kg SO_2 eq	86.50%	89.33%	90.67%	6.00E-02
Eutrophication	kg PO_4--- eq	86.97%	89.66%	91.95%	2.61E-02

Table S2. Distribution of global environmental impact per kg of natural cork stopper, CML Methodology. Punched method.

	Size: 24x44			**Size: 26x44**		
Category	**Phase 1**	**Phase2**	**Phase3**	**Phase 1**	**Phase2**	**Phase3**
AD	99.73%	0.32%	0.11%	99.49%	0.25%	0.09%
AD (FF)	98.13%	1.78%	0.45%	98.23%	1.42%	0.37%
GWP	98.06%	1.79%	0.23%	99.07%	1.44%	0.19%
ODP	96.98%	2.55%	0.46%	97.54%	2.06%	0.38%
HT	99.27%	0.70%	0.10%	99.36%	0.57%	0.08%
FWAE	98.78%	1.00%	0.13%	99.13%	0.80%	0.10%
MAE	98.06%	1.87%	0.25%	98.77%	1.50%	0.20%
TE	99.20%	0.69%	0.12%	99.35%	0.55%	0.10%
PO	98.35%	1.46%	0.19%	98.69%	1.17%	0.15%
AC	97.11%	2.74%	0.32%	97.61%	2.19%	0.26%
EU	98.68%	1.23%	0.15%	98.75%	0.98%	0.12%

Table S3. Distribution of global environmental impact per kg of natural cork stopper, CML Methodology. Turned method.

	Size: 24x44			Size: 26x44		
Category	**Phase 1**	**Phase2**	**Phase3**	**Phase 1**	**Phase2**	**Phase3**
AD	99.47%	0.36%	0.11%	99.77%	0.27%	0.08%
AD (FF)	97.30%	2.04%	0.43%	97.60%	1.50%	0.32%
GWP	98.11%	2.06%	0.22%	98.31%	1.54%	0.16%
ODP	96.64%	2.95%	0.44%	98.06%	2.19%	0.33%
HT	99.10%	0.81%	0.09%	99.34%	0.59%	0.07%
FWAE	98.81%	1.16%	0.12%	98.97%	0.84%	0.09%
MAE	97.50%	2.16%	0.24%	98.34%	1.59%	0.17%
TE	99.11%	0.79%	0.11%	99.06%	0.56%	0.08%
PO	98.13%	1.69%	0.18%	98.58%	1.25%	0.13%
AC	96.64%	3.13%	0.30%	97.50%	2.33%	0.22%
EU	98.72%	1.42%	0.14%	98.85%	1.06%	0.11%