Final report

MONITORING OF THE BELGIAN MARKET WITH REGARD TO ORGANIC RESIDUES IN TAMPONS SANITARY NAPKINS – Part 2: Target analyses

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Study accomplished under the authority of the Federal Public ServiceHealth, Food Chain Safety and Environment

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SUMMARY

In this report the results of the quantitative determinations of selected carcinogenic, mutagenic and reprotoxic substances (CMR) in tampons and sanitary pads are presented. Tampons and sanitary pads available on the Belgian market have been collected and have been extracted and analysed for the presence of PAH, biocides, phthalates, phenolic compounds, PFOA, BTEX and dioxins using specific analytical techniques. The results show that there is in general no reason for concern, as the concentrations of most compounds were below the limit of quantification while other compounds were detected only in negligible concentrations. On the basis of these results it can be concluded that the use of tampons and sanitary pads sold on the Belgian market can be considered to be safe.

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CHAPTER 1 INTRODUCTION

The objective of the present study is to analyse tampons and sanitary napkins sold on the Belgian market in order to assess their possible content of residues of organic substances. Consumer associations have demonstrated, on the basis of analyses, that tampons and sanitary napkins contain residues of organic substances which sometimes may be classified as CMR or identified as (possible) EDCs (Endocrine Disrupting Chemicals). The aim of the analyses is to assess the possible content of substances in tampons and sanitary napkins on a large scale and to quantify a list of preselected CMR and EDC substances. On the basis of these results, the FPS Health, Food Chain Safety and Environment will take appropriate measures, if necessary.

The study consists of 2 parts, resp. a broad unknown screening and the quantitative determination of selected organic compounds of concern:

- Part 1: Sampling on the Belgian market, preparation and analysis of samples of tampons and sanitary napkins in order to determine their possible content of organic substances present in the textile part. This analysis consists of a broad screening without reference molecule and on a qualitative basis.
- Part 2: Sampling on the Belgian market, preparation and analysis of samples of tampons and sanitary napkins in order to determine, on a quantitative basis, their possible content of selected organic substances present in the textile part.

In part 1, 3 tampons and 3 sanitary napkins coming from different suppliers and of different brands present on the Belgian market (2 store brands, 2 bio-brands, 2 big-name brands) were purchased. Inventory of the samples, preparation of test portions, broad screening on the presence of organic residues and formal identification of the molecules detected were carried out and reported per sample mentioning the results. In general on the basis of UPLC-HRMS and GC-MS screening data it could be concluded that organic residues of immediate concern were not found in the diaper extracts. No pesticides, POP's, endocrine disrupting chemicals or known CMR's were observed. Only some phthalates, caprolactam, trichloropropyl phosphate (TCPP) and some UV-absorbers might draw attention, but concentrations were generally low (low mg/kg)..

In this report the results of the quantitative analysis of selected CMR and EDC substances (part 2), using specific analytical methods, are presented. More than 20 tampons and sanitay napkins were quantitatively analysed for the presence of 90 potential contaminants.

CHAPTER 2 WORKPACKAGE 2 – QUANTITATIVE ANALYSIS OF TAMPONS AND SANITARY PADS

The articles that were analyzed were tampons and sanitary pads that differ in terms of structure, trademark and constituent materials. The analysis consisted of the pretreatment and extraction of the articles and the quantitative determination (w/w %) of the target compounds listed in 2.1, using an appropriate detection technique. The selected analysis method should lead to the lowest limit of quantification (LOQ - Limit of Quantification) with the lowest measurement uncertainty in terms of measurement. The methods of analysis can be found in detail in Annex A - G.

2.1. COMPOUNDS OF INTEREST FOR QUANTITATIVE ANALYSIS

Based on the results of PART 1 (screening results) and the compounds listed in the project specifications a final compound list has been defined for target analysis. This list is given in Table 1.

Table 1: Target compounds for quantitative analysis – PART 2

#		CAS	Name	Cfr proposal	Additional	Technique	WP
1	Glyphosate	1071-83-6	Glyphosate	x		LC-MS/MS (ESI-) after derivatisation	2.1
2		743141-63-2	AMPA		x	LC-MS/MS (ESI-) after derivatisation	2.1
3	PAH	91-20-3	Naphthalene	x		GC-MS	2.2
4		208-96-8	Acenaphthylene	x		GC-MS	2.2
5		83-32-9	Acenaphtene	x		GC-MS	2.2
6		86-73-7	Fluorene	x		GC-MS	2.2
7		85-01-8	Phenanthrene	x		GC-MS	2.2
8		120-12-7	Anthracene	x		GC-MS	2.2
9		206-44-0	Fluoranthene	x		GC-MS	2.2
10		129-00-0	Pyrene	x		GC-MS	2.2
11		56-55-3	B(a)anthracene	x		GC-MS	2.2
12		218-01-9	Chrysene	x		GC-MS	2.2
13		205-99-2	B(b)fluoranthene	x		GC-MS	2.2
14		205-97-0	B(k)fluoranthene	x		GC-MS	2.2
15		205-82-3	B(j)fluoranthene		x	GC-MS	2.2
16		192-97-2	B(e)pyrene		x	GC-MS	2.2
17		50-32-8	B(a)pyrene	x		GC-MS	2.2
18		139-39-5	Ind(123cd)pyrene	x		GC-MS	2.2

19		53-70-3	diB(ah)anthracene	x		GC-MS	2.2
20		191-24-2	B(ghi)perylene	x		GC-MS	2.2
21	Phthalates, TCPP and isosorbide	131-11-3	Dimethyl phthalate (DMP)	x		GC-MS	2.3
22		84-66-2	Diethyl phthalate (DEP)	x		GC-MS	2.3
23		131-16-8	Di-n-propyl phthalate (DPrP)		x	GC-MS	2.3
24		84-69-5	Diisobutyl phthalate (DIBP)	x		GC-MS	2.3
25		84-74-2	Di-n-butyl phthalate (DBP)	x		GC-MS	2.3
26		85-68-7	Benzyl butyl phthalate (BBP)	x		GC-MS	2.3
27		605-50-5	Diisopentyl phthalate (DIPP)		x	GC-MS	2.3
28		776297-69-9	Pentyl isopentyl phthalate (PIPP)		x	GC-MS	2.3
29		131-18-0	Di-n-pentyl phthalate (DPP)		x	GC-MS	2.3
30		146-50-9	Diisohexyl phthalate (DIHxP)		x	GC-MS	2.3
31		84-75-3	Di-n-hexyl phthalate (DHxP)		x	GC-MS	2.3
32		117-81-7	Diethylhexyl phthalate (DEHP)	x		GC-MS	2.3
33		84-61-7	Dicyclohexyl phthalate (DCHP)	x		GC-MS	2.3
34		71888-89-6	Diisoheptyl phthalate (DIHpP)		x	GC-MS	2.3
35		3648-21-3	Di-n-heptyl phthalate (DHpP)		x	GC-MS	2.3
36		117-84-0	Di-n-octyl phthalate (DOP)	x		GC-MS	2.3
37		28553-12-0	Diisononyl phthalate (DINP)	x		GC-MS	2.3
38		26761-40-0	Diisodecyl phthalate (DIDP)	x		GC-MS	2.3
39		96507-86-7	Diisoundecyl phthalate (DIUP)		x	GC-MS	2.3
40		3648-20-2	Di-n-undecyl phthalate (DUP)	x		GC-MS	2.3
41		6422-86-2	Dioctyl terephthalate (DOTP)		x	GC-MS	2.3
42		13674-84-5	Tris(2-chloro-1-methylethyl)phosphate (TCPP)	x		GC-MS	2.3
43		56-38-2	Methyl-parathion	x		GC-MS	2.3 2.5
44		652-67-5	Isosorbide		x	GC-MS	2.3
45	biocides, phenolic	99-76-3	Methylparaben		x	LC-MS/MS (ESI-)	2.4
46		120-47-8	Ethylparaben		x	LC-MS/MS (ESI-)	2.4
47		94-13-3	Propylparaben		x	LC-MS/MS (ESI-)	2.4

48		94-26-8	Butylparaben	x		LC-MS/MS (ESI-)	2.4
49		140-66-9	4-(1,1,3,3-tetramethylbutyl)phenol (4-t-octylfenol)		x	LC-MS/MS (ESI-)	2.4
50		104-40-5	Nonylfenol	x		LC-MS/MS (ESI-)	2.4
51		80-09-1	Bisfenol S	x		LC-MS/MS (ESI-)	2.4
52		104-43-8	Dodecylfenol		x	LC-MS/MS (ESI-)	2.4
53		97-23-4	Dichlorophene	x		LC-MS/MS (ESI-)	2.4
54		3380-34-5	Triclosan	x		LC-MS/MS (ESI-)	2.4
55		335-67-1	Perfluorooctanoic acid (PFOA)	x		LC-MS/MS (ESI-)	2.4
56	biocides and caprolactam	105-60-2	6-Caprolactam	x		LC-MS/MS (ESI+)	2.5
57		2682-20-4	2-methyl-4-isothiazolin-3-one (MIT)	x		LC-MS/MS (ESI+)	2.5
58		10265-92-6	Methamidophos		x	LC-MS/MS (ESI+)	2.5
59		26172-55-4	5-chloro-2-methyl-4-isothiazoline-3-one (CIT)		x	LC-MS/MS (ESI+)	2.5
60		2634-33-5	1,2-benzisothiazoline-3-one (BIT)	x		LC-MS/MS (ESI+)	2.5
61		116-06-3	Aldicarb	x		LC-MS/MS (ESI+)	2.5
62		26530-20-1	2-octyl-2H-isothizaol-3-one (OIT)		x	LC-MS/MS (ESI+)	2.5
63		6923-22-4	Monocrotophos		x	LC-MS/MS (ESI+)	2.5
64		7286-69-3	Sebutylazine	x		LC-MS/MS (ESI+)	2.5
65		5914-41-3	Terbutylazine	x		LC-MS/MS (ESI+)	2.5
66		7173-51-5	Didecyldimethyl ammonium chloride (C10DADMA)	x		LC-MS/MS (ESI+)	2.5
67		83905-01-5	Azithromycine	x		LC-MS/MS (ESI+)	2.5
68	BTEX	71-43-2	Benzene		x	headspace GC-MS	2.3
69		108-88-3	Toluene		x	headspace GC-MS	2.3
70		100-41-4	Ethylbenzene		x	headspace GC-MS	2.3
71		1330-20-7/ 106-42-3	p+m-xylene		x	headspace GC-MS	2.3
72		100-42-5	Styrene	x		headspace GC-MS	2.3
73		95-47-6	o-xylene		x	headspace GC-MS	2.3
74	dioxines (PCDD/F congeners)	51207-31-9	2,3,7,8-TCDF	x		GC-HRMS	SGS
75		1746-01-6	2,3,7,8-TCDD	x		GC-HRMS	SGS
76		57117-41-6	1,2,3,7,8-PeCDF	x		GC-HRMS	SGS
77		57117-31-4	2,3,4,7,8-PeCDF	x		GC-HRMS	SGS
78		40321-76-4	1,2,3,7,8-PeCDD	x		GC-HRMS	SGS
79		70648-26-9	1,2,3,4,7,8-HxCDF	x		GC-HRMS	SGS
80		57117-44-9	1,2,3,6,7,8-HxCDF	x		GC-HRMS	SGS
81		60851-34-5	2,3,4,6,7,8-HxCDF	x		GC-HRMS	SGS

82		72918-21-9	1,2,3,7,8,9-HxCDF	x		GC-HRMS	SGS
83		39227-28-6	1,2,3,4,7,8-HxCDD	x		GC-HRMS	SGS
84		57653-85-7	1,2,3,6,7,8-HxCDD	x		GC-HRMS	SGS
85		19408-74-3	1,2,3,7,8,9-HxCDD	x		GC-HRMS	SGS
86		67562-39-4	1,2,3,4,6,7,8-HpCDF	x		GC-HRMS	SGS
87		55673-89-7	1,2,3,4,7,8,9-HpCDF	x		GC-HRMS	SGS
88		35822-46-9	1,2,3,4,6,7,8-HpCDD	x		GC-HRMS	SGS
89		39001-02-0	OCDF	x		GC-HRMS	SGS
90		3268-87-9	OCDD	x		GC-HRMS	SGS

2.2. SAMPLING

During PART 2 of the project, more than 20 tampons and sanitary pads were selected and classified into 3 brands (store, bio and big-name). The samples were bought in the supermarkets located in the region of Mol (Turnhout, oud-Turnhout, Westerlo) and are considered representative for the whole Belgian territory. In Table 2, the selection of the tampons and sanitary pads representative for the Belgian territory is listed. In total 24 samples were purchased of which 7 big name brands, 7 bio brands and 10 store brands.

Table 2: Selection of tampons and sanitary napkins representative for the Belgian market.

#	VITO code	Description	Brand and type
1	181106-0002	Sample 1 - Tampon	Big brand
2	181106-0003	Sample 2 – Sanitary pad	Big brand
3	181106-0004	Sample 3 - Tampon	Bio brand
4	181106-0005	Sample 4 – Sanitary pad	Bio brand
5	181106-0006	Sample 5 - Tampon	Store brand
6	181106-0007	Sample 6 – Sanitary pad	Store brand
7	181106-0008	Sample 7 – Tampon	Bio brand
8	181106-009	Sample 8 – Tampon	Big brand
9	181106-0010	Sample 9 - Tampon	Store brand

10	181106-0011	Sample 10 – Sanitary pad	Store brand
11	181106-0012	Sample 11 – Sanitary pad	Big brand
12	181106-0013	Sample 12 – Sanitary pad	Store brand
13	181106-0014	Sample 13 – Sanitary pad	Big brand
14	181106-0015	Sample 14 – Sanitary pad	Store brand
15	181106-0016	Sample 15 – Sanitary pad	Bio brand
16	181106-0017	Sample 16 – Sanitary pad	Bio brand
17	181106-0018	Sample 17 – Tampon	Store brand
18	181106-0019	Sample 18 – Sanitary pad	Big brand
19	181106-0020	Sample 19 – Sanitary pad	Big brand
20	181106-0021	Sample 20 - Tampon	Big brand
21	181212-0001	Sample 21 – Sanitary pad	Bio brand
22	181212-0002	Sample 22 - Tampon	Bio brand
23	190214-0099	Sample 23 - Tampon	Store brand
24	190225-0078	Sample 24 - Tampon	Store brand

A picture was taken of every sample and the following information was registered in an Excel sheet: unique VITO code, unique production number, country of origin, amount in package, location of purchase, date of purchase, information on label.

2.3. SAMPLE PREPARATION FOR ANALYSIS

After removal of the packaging tampons were analysed as a whole including the string. Typically 2 or 3 tampons were extracted after cutting ino small pieces. From the sanitary pads only the part coming into contact with the skin was taken and cut into small pieces; the outer protective layer was removed. The content of one sanitary pad was used for analysis.

2.4. QUANTITATIVE ANALYSIS

In total 7 methods were used for the target (quantitative) analysis of the tampons and sanitary pads (n=24). A summary of the methods is listed in Table 3. The pretreatment (extraction) and the details of the analytical method can be found in Annex A – G of the report. The results of the measurements (see 2.5) are expressed in mg/kg, except for dioxins (ng TEQ/kg). Chromatograms are shown for compounds detected in a concentration >0.1 mg/kg.

Remarks:

- The signal of TCPP was interfered by coextracted matrix constituents.
- Isosorbide could not be dissolved in the extraction solvent (hexane) for GC-MS analysis and was not determined.
- For budgetary reasons the analysis of PCDD/F was limited to 20 samples as stated in the proposal.

Table 3: Summary of the different methods used for quantification

#	Name	Sample pretreatment	Analytical technique	Details Annex
1	Glyphosate	SPE, derivatization	LC-MS/MS (ESI-)	A
2	Polyaromatic hydrocarbons (PAH)	Extraction with aceton/n-hexane (20/80; v/v) and clean-up on a combined silica/alumina column	GC-MS	B
3	Phthalates, TCPP and pesticides	DCM extraction (sonication)	GC-MS	C
4	Biocides, phenolic compounds, parabens and PFOA	Methanol extraction (sonication)	LC-MS/MS (ESI-)	D
5	Biocides and caprolactam	Methanol extraction (sonication)	LC-MS/MS (ESI+)	E
6	Mono aromatic hydrocarbons (BTEX)	Methanol extraction (sonication) – headspace measurements	headspace GC-MS	F
7	Dioxines (PCDD/F congeners)	Soxhlet extraction	GC-HRMS	G

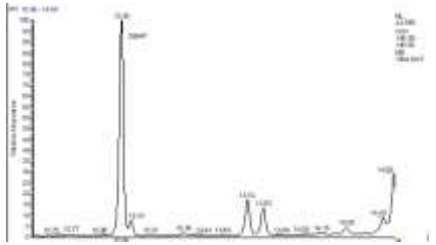
2.5. RESULTS

2.5.1. SAMPLE 1 - 181106-0002

VITO code	181106-0002
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	
Store of purchase	
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	artificial fibre (rayon) polyester, purified cotton, perfume free
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(k=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	3,68	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	3,68	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	1,87	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	1,87	0,010	27%	0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	1,87	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	1,87	0,010	16%	< 0,01	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	1,87	0,010	47%	0,02	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	1,87	0,010	41%	0,03	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	1,87	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	1,87	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	1,87	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	1,87	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	1,87	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	1,87	0,100	25%	0,32	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	1,87	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	1,87	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	1,87	0,010	36%	0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	1,87	0,010	33%	0,02	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	1,87	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	1,87	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	1,87	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	1,87	0,100	55%	0,01	
41		Methyl-parathion	GC-MS	ANNEX C	1,87	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	1,87	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

ND = not determined

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	3,79	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	3,79	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	3,79	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	3,79	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	3,79	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	3,79	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	3,79	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	3,79	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	3,79	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	3,79	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	3,79	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	3,79	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	3,79	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	3,79	0,3	indicative	<0,3	

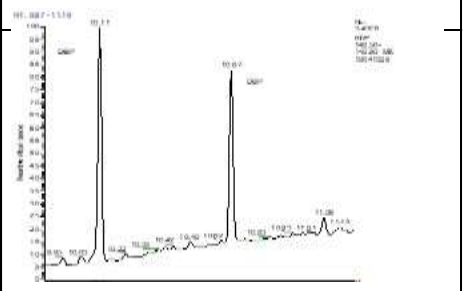
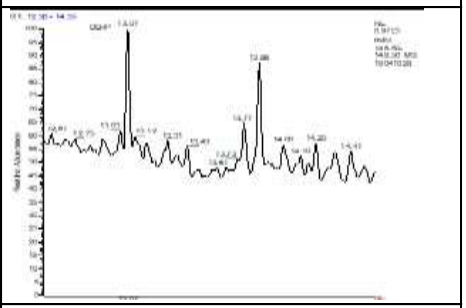
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	3,79	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	3,79	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	3,79	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	3,79	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	3,79	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	3,79	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,077	20%	<0,0077	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,081	20%	<0,081	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,088	20%	<0,0026	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,088	20%	<0,026	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,13	20%	<0,13	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,064	20%	<0,0064	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,058	20%	<0,0058	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,062	20%	<0,0062	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,051	20%	<0,0051	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,084	20%	<0,0084	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,064	20%	<0,0064	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,075	20%	<0,0075	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,54	20%	<0,0054	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,54	20%	<0,0054	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,54	20%	<0,0054	
89		OCDF	GC-HRMS	ANNEX G	*5*	<2,1	20%	<0,00064	
90		OCDD	GC-HRMS	ANNEX G	*5*	<2,1	20%	<0,00064	
		Total (upper bound)						<0,31	

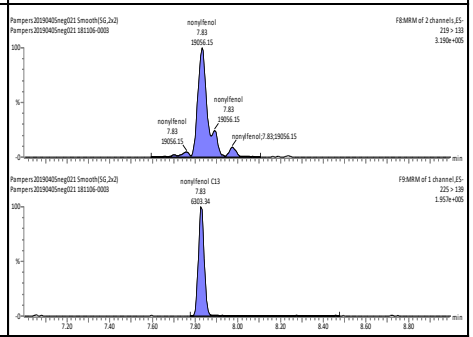
2.5.2. SAMPLE 2 - 181106-0003

VITO code	181106-0003
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	
Store of purchase	
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	100% cotton, perfume free
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	6,37	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	6,37	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

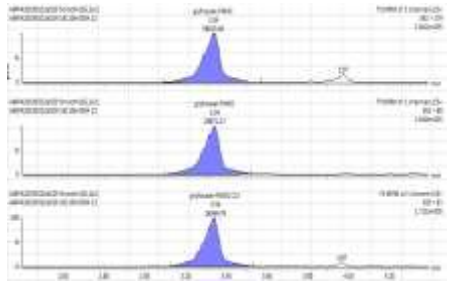
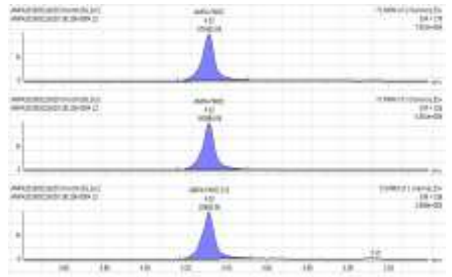
#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	4,54	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	4,54	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	4,54	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	4,54	0,010	16%	0,35	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	4,54	0,010	47%	0,22	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	4,54	0,010	41%	0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	4,54	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	4,54	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	4,54	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	4,54	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	4,54	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	4,54	0,100	25%	0,12	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	4,54	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	4,54	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	4,54	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	4,54	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	4,54	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	4,54	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	4,54	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	4,54	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	4,54	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	4,54	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	5,80	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	5,80	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	5,80	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	5,80	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	5,80	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	5,80	0,05	49%	0,40	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	5,80	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	5,80	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	5,80	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	5,80	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	5,80	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	23%	0,025	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	5,80	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	5,80	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	5,80	0,3	indicative	<0,3	

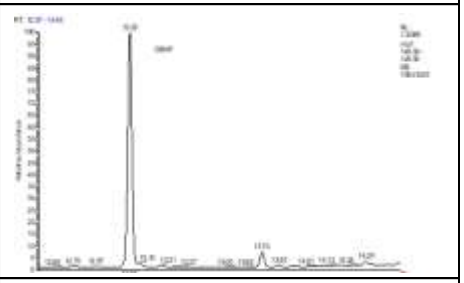
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	5,80	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	5,80	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	5,80	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	5,80	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	5,80	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	5,80	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,051	20%	<0,0051	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,053	20%	<0,053	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,058	20%	<0,0017	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,058	20%	<0,017	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,083	20%	<0,083	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,042	20%	<0,0042	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,038	20%	<0,0038	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,041	20%	<0,0041	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,034	20%	<0,0034	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,055	20%	<0,0055	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,042	20%	<0,0042	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,049	20%	<0,0049	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,35	20%	<0,0035	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,35	20%	<0,0035	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,35	20%	<0,0035	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,4	20%	<0,00042	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,4	20%	<0,00042	
		Total (upper bound)						<0,2	

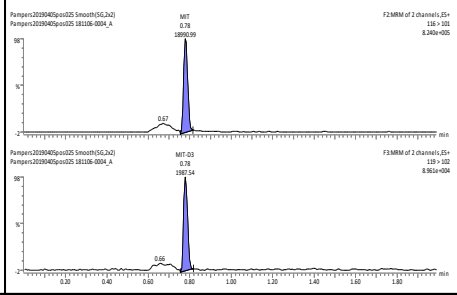
2.5.3. SAMPLE 3 - 181106-0004

VITO code	181106-0004
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Bio brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,50	0,001	35%	0,071	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,50	0,001	58%	0,25	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,34	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,34	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,34	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,34	0,010	16%	< 0,01	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,34	0,010	47%	0,04	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,34	0,010	41%	0,02	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,34	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,34	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,34	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,34	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,34	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,34	0,100	25%	0,60	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,34	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,34	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,34	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,34	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,34	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,34	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,34	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,34	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	2,34	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,34	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	5,07	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	5,07	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	5,07	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	5,07	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	5,07	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	5,07	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	5,07	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	5,07	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	5,07	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	5,07	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	5,07	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	23%	0,36	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	53%	0,014	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	5,07	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	5,07	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	5,07	0,3	indicative	<0,3	

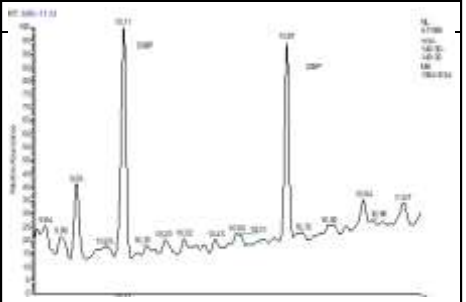
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	5,07	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	5,07	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	5,07	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	5,07	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	5,07	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	5,07	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,064	20%	<0,0064	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,067	20%	<0,067	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,072	20%	<0,0022	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,072	20%	<0,022	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,10	20%	<0,1	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,053	20%	<0,0053	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,048	20%	<0,0048	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,051	20%	<0,0051	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,042	20%	<0,0042	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,069	20%	<0,0069	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,053	20%	<0,0053	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,062	20%	<0,0062	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,44	20%	<0,0044	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,44	20%	<0,0044	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,44	20%	<0,0044	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,8	20%	<0,00053	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,8	20%	<0,00053	
		Total (upper bound)						<0,25	

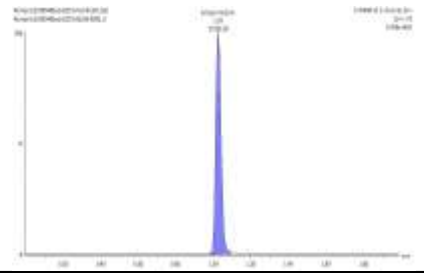
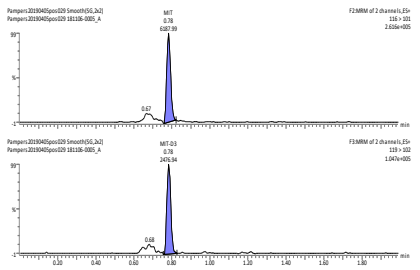
2.5.4. SAMPLE 4 - 181106-0005

VITO code	181106-0005
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Bio brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	100% cotton, plastic free, perfume free and chlorine free
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	10,49	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	10,49	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	10,84	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	10,84	0,010	27%	0,02	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	10,84	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	10,84	0,010	16%	0,19	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	10,84	0,010	47%	0,13	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	10,84	0,010	41%	0,02	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	10,84	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	10,84	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	10,84	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	10,84	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	10,84	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	10,84	0,100	25%	< 0,1	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	10,84	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	10,84	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	10,84	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	10,84	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	10,84	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	10,84	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	10,84	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	10,84	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	10,84	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	10,84	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	8,39	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	8,39	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	8,39	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	8,39	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	8,39	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	8,39	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	8,39	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	8,39	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	8,39	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	8,39	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	8,39	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	24%	0,35	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	23%	0,15	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	56%	0,04	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	8,39	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	8,39	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	8,39	0,3	indicative	<0,3	

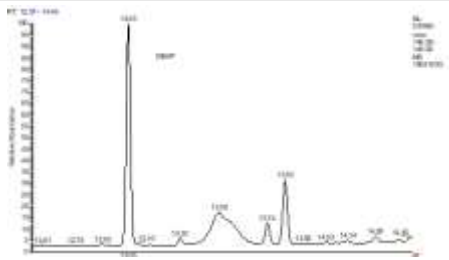
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	8,39	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	8,39	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	8,39	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	8,39	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	8,39	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	8,39	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,030	20%	<0,0030	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,031	20%	<0,031	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,034	20%	<0,001	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,034	20%	<0,01	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,049	20%	<0,049	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,025	20%	<0,0025	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,022	20%	<0,0022	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,024	20%	<0,0024	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,020	20%	<0,002	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,032	20%	<0,0032	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,025	20%	<0,0025	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,029	20%	<0,0029	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,21	20%	<0,0021	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,21	20%	<0,0021	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,21	20%	<0,0021	
89		OCDF	GC-HRMS	ANNEX G	*5*	<0,83	20%	<0,00025	
90		OCDD	GC-HRMS	ANNEX G	*5*	<0,83	20%	<0,00025	
		Total (upper bound)						<0,12	

2.5.5. SAMPLE 5 - 181106-0006

VITO code	181106-0006
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Store brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(k=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,28	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,28	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,11	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,11	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,11	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,11	0,010	16%	0,02	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,11	0,010	47%	0,02	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,11	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,11	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,11	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,11	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,11	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,11	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,11	0,100	25%	0,30	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,11	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,11	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,11	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,11	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,11	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,11	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,11	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,11	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	2,11	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,11	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	4,68	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	4,68	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	4,68	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	4,68	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	4,68	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	4,68	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	4,68	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	4,68	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	4,68	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	4,68	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	4,68	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	4,68	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	4,68	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	4,68	0,3	indicative	<0,3	

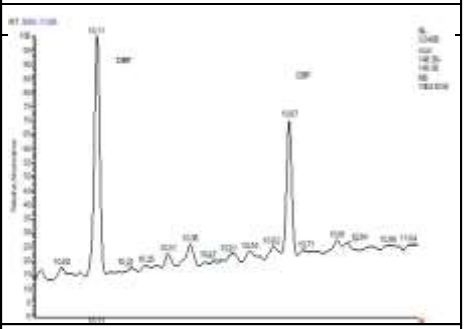
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	4,68	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	4,68	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	4,68	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	4,68	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	4,68	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	4,68	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,053	20%	<0,0053	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,056	20%	<0,056	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,060	20%	<0,0018	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,060	20%	<0,018	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,087	20%	<0,087	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,044	20%	<0,0044	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,040	20%	<0,0040	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,043	20%	<0,0043	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,035	20%	<0,0035	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,058	20%	<0,0058	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,044	20%	<0,0044	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,052	20%	<0,0052	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,37	20%	<0,0037	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,37	20%	<0,0037	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,37	20%	<0,0037	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,5	20%	<0,00044	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,5	20%	<0,00044	
		Total (upper bound)						<0,21	

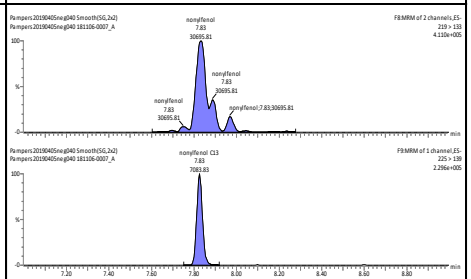
2.5.6. SAMPLE 6 - 181106-0007

VITO code	181106-0007
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Store brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	9,43	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	9,43	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	< 0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	9,03	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	9,03	0,010	27%	0,04	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	9,03	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	9,03	0,010	16%	0,16	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	9,03	0,010	47%	0,10	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	9,03	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	9,03	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	9,03	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	9,03	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	9,03	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	9,03	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	9,03	0,100	25%	< 0,1	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	9,03	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	9,03	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	9,03	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	9,03	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	9,03	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	9,03	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	9,03	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	9,03	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	9,03	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	9,03	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	9,43	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	9,43	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	9,43	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	9,43	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	9,43	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	9,43	0,05	49%	0,37	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	9,43	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	9,43	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	9,43	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	9,43	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	9,43	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	9,43	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	9,43	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E		0,3	indicative	<0,3	

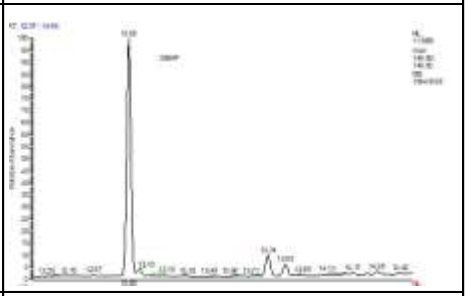
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	9,43	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	9,43	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	9,43	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	9,43	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	9,43	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	9,43	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,027	20%	<0,0027	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,029	20%	<0,029	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,031	20%	<0,00094	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,031	20%	<0,0094	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,045	20%	<0,045	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,023	20%	<0,0023	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,021	20%	<0,0021	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,022	20%	<0,0022	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,018	20%	<0,0018	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,030	20%	<0,0030	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,023	20%	<0,0023	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,027	20%	<0,0027	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,19	20%	<0,0019	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,19	20%	<0,0019	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,19	20%	<0,0019	
89		OCDF	GC-HRMS	ANNEX G	*5*	<0,76	20%	<0,00023	
90		OCDD	GC-HRMS	ANNEX G	*5*	<0,76	20%	<0,00023	
		Total (upper bound)						<0,11	

2.5.7. SAMPLE 7 - 181106-0008

VITO code	181106-0008
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Bio brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	100% cotton
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,44	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,44	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,21	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,21	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,21	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,21	0,010	16%	< 0,01	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,21	0,010	47%	0,02	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,21	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,21	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,21	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,21	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,21	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,21	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,21	0,100	25%	0,13	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,21	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,21	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,21	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,21	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,21	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,21	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,21	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,21	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	2,21	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,21	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	4,48	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	4,48	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	4,48	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	4,48	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	4,48	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	4,48	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	4,48	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	4,48	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	4,48	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	4,48	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	4,48	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	4,48	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	4,48	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	4,48	0,3	indicative	<0,3	

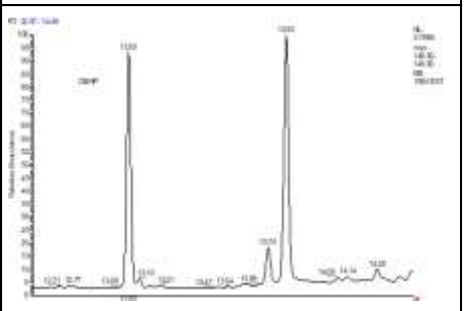
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	4,48	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	4,48	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	4,48	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	4,48	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	4,48	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	4,48	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,073	20%	<0,0073	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,077	20%	<0,077	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,083	20%	<0,0025	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,083	20%	<0,025	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,12	20%	<0,12	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,061	20%	<0,0061	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,054	20%	<0,0054	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,059	20%	<0,0059	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,048	20%	<0,0048	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,079	20%	<0,0079	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,061	20%	<0,0061	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,071	20%	<0,0071	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,50	20%	<0,0050	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,50	20%	<0,0050	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,50	20%	<0,0050	
89		OCDF	GC-HRMS	ANNEX G	*5*	<2,0	20%	<0,00061	
90		OCDD	GC-HRMS	ANNEX G	*5*	<2,0	20%	<0,00061	
		Total (upper bound)						<0,29	

2.5.8. SAMPLE 8 - 181106-0009

VITO code	181106-009
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Big brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,49	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,49	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,34	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,34	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,34	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,34	0,010	16%	0,03	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,34	0,010	47%	0,02	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,34	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,34	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,34	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,34	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,34	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,34	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,34	0,100	25%	0,15	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,34	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,34	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,34	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,34	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,34	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,34	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,34	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,34	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	2,34	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,34	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	4,74	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	4,74	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	4,74	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	4,74	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	4,74	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	4,74	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	4,74	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	4,74	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	4,74	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	4,74	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	4,74	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	4,74	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	4,74	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	4,74	0,3	indicative	<0,3	

		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	4,74	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	4,74	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	4,74	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	4,74	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	4,74	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	4,74	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,61	20%	<0,061	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,65	20%	<0,65	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,70	20%	<0,021	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,70	20%	<0,21	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<1,0	20%	<1,0	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,51	20%	<0,051	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,46	20%	<0,046	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,5	20%	<0,050	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,41	20%	<0,041	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,67	20%	<0,067	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,51	20%	<0,051	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,60	20%	<0,060	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<4,3	20%	<0,043	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<4,3	20%	<0,043	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<4,3	20%	<0,043	
89		OCDF	GC-HRMS	ANNEX G	*5*	<17	20%	<0,0051	
90		OCDD	GC-HRMS	ANNEX G	*5*	<17	20%	<0,0051	
		Total (upper bound)						<2,5	

2.5.9. SAMPLE 9 - 181106-0010

VITO code	181106-0010
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Store brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	5,14	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	5,14	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

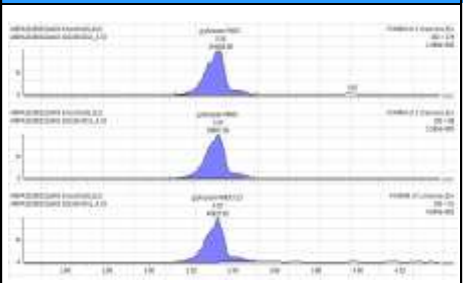
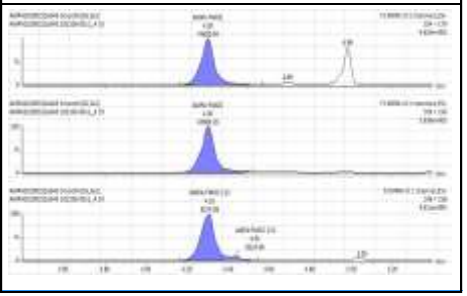
#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,69	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,69	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,69	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,69	0,010	16%	< 0,01	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,69	0,010	47%	< 0,01	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,69	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,69	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,69	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,69	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,69	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,69	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,69	0,100	25%	< 0,1	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,69	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,69	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,69	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,69	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,69	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,69	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,69	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,69	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	2,69	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,69	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	5,27	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	5,27	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	5,27	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	5,27	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	5,27	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	5,27	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	5,27	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	5,27	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	5,27	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	5,27	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	5,27	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	5,27	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	5,27	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	5,27	0,3	indicative	<0,3	

		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	5,27	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	5,27	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	5,27	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	5,27	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	5,27	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	5,27	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,048	20%	<0,0048	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,050	20%	<0,050	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,054	20%	<0,0016	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,054	20%	<0,016	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,078	20%	<0,078	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,040	20%	<0,0040	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,036	20%	<0,0036	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,038	20%	<0,0038	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,032	20%	<0,0032	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,051	20%	<0,0051	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,040	20%	<0,0040	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,046	20%	<0,0046	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,33	20%	<0,0033	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,33	20%	<0,0033	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,33	20%	<0,0033	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,3	20%	<0,00040	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,3	20%	<0,00040	
		Total (upper bound)						<0,19	

2.5.10. SAMPLE 10 - 181106-0011

VITO code	181106-0011
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Store brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	9,10	0,001	35%	0,052	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	9,10	0,001	58%	0,082	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	10,49	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	10,49	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	10,49	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	10,49	0,010	16%	< 0,01	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	10,49	0,010	47%	< 0,01	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	10,49	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	10,49	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	10,49	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	10,49	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	10,49	0,010	16%	0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	10,49	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	10,49	0,100	25%	< 0,1	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	10,49	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	10,49	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	10,49	0,010	36%	0,02	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	10,49	0,010	33%	0,04	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	10,49	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	10,49	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	10,49	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	10,49	0,100	55%	0,02	
41		Methyl-parathion	GC-MS	ANNEX C	10,49	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	10,49	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	8,95	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	8,95	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	8,95	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	8,95	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	8,95	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	8,95	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	8,95	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	8,95	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	8,95	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	8,95	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	8,95	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	8,95	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	8,95	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	8,95	0,3	indicative	<0,3	

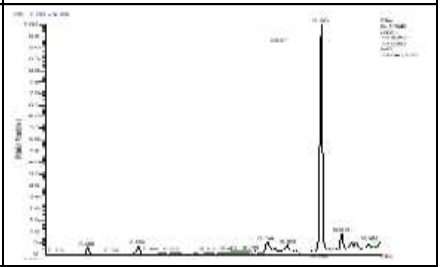
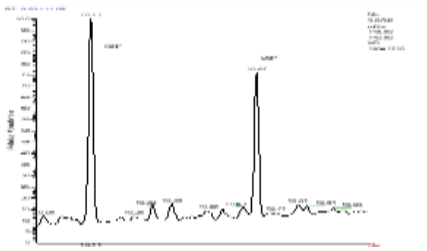
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	8,95	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	8,95	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	8,95	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	8,95	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	8,95	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	8,95	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
89		OCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
90		OCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
		Total (upper bound)							

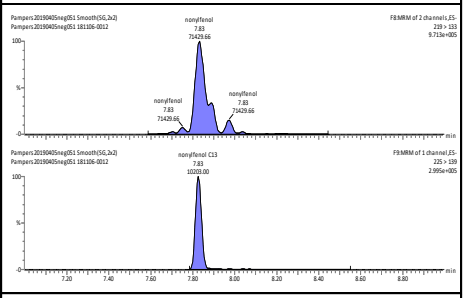
2.5.11. SAMPLE 11 - 181106-0012

VITO code	181106-0012
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	
Store of purchase	
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(k=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	5,87	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	5,87	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	5,61	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	5,61	0,010	27%	0,67	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	5,61	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	5,61	0,010	16%	0,32	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	5,61	0,010	47%	0,18	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	5,61	0,010	41%	0,02	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	5,61	0,010	33%	0,02	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	5,61	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	5,61	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	5,61	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	5,61	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	5,61	0,100	25%	< 0,1	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	5,61	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	5,61	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	5,61	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	5,61	0,010	33%	0,02	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	5,61	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	5,61	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	5,61	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	5,61	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	5,61	0,100	43%	<0,2	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	5,61	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	6,69	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	6,69	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	6,69	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	6,69	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	6,69	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	6,69	0,05	49%	0,92	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	6,69	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	6,69	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	6,69	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	6,69	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	6,69	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	6,69	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	6,69	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	6,69	0,3	indicative	<0,3	

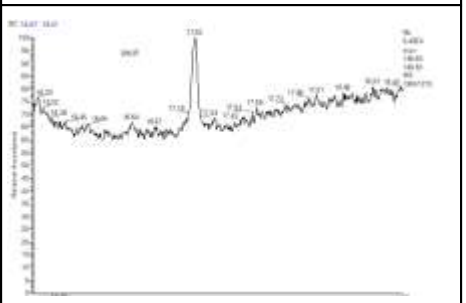
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	6,69	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	6,69	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	6,69	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	6,69	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	6,69	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	6,69	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
89		OCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
90		OCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
		Total (upper bound)							

2.5.12. SAMPLE 12 - 181106-0013

VITO code	181106-0013
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Store brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	100% PEFC certified
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	7,07	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	7,07	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	7,01	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	7,01	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	7,01	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	7,01	0,010	16%	0,05	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	7,01	0,010	47%	< 0,01	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	7,01	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	7,01	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	7,01	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	7,01	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	7,01	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	7,01	0,010	15%	0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	7,01	0,100	25%	< 0,1	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	7,01	0,010	31%	0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	7,01	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	7,01	0,010	36%	0,02	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	7,01	0,010	33%	0,02	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	7,01	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	7,01	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	7,01	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	7,01	0,100	55%	0,12	
41		Methyl-parathion	GC-MS	ANNEX C	7,01	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	7,01	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	7,31	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	7,31	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	7,31	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	7,31	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	7,31	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	7,31	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	7,31	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	7,31	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	7,31	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	7,31	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	7,31	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	7,31	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	7,31	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	7,31	0,3	indicative	<0,3	

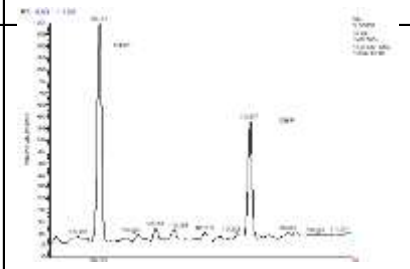
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	7,31	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	7,31	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	7,31	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	7,31	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	7,31	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	7,31	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,035	20%	<0,0035	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,037	20%	<0,037	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	0,06	20%	0,0018	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,040	20%	<0,012	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,058	20%	<0,058	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,029	20%	<0,0029	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,026	20%	<0,0026	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	0,035	20%	0,0035	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,023	20%	<0,0023	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,038	20%	<0,0038	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,029	20%	<0,0029	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,034	20%	<0,0034	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,24	20%	<0,0024	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,24	20%	<0,0024	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,24	20%	<0,0024	
89		OCDF	GC-HRMS	ANNEX G	*5*	<0,98	20%	<0,00029	
90		OCDD	GC-HRMS	ANNEX G	*5*	<0,98	20%	<0,00029	
		Total (upper bound)						0,14	

2.5.13. SAMPLE 13 - 181106-0014

VITO code	181106-0014
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Big brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	6,05	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	6,05	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	5,67	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	5,67	0,010	27%	0,05	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	5,67	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	5,67	0,010	16%	0,57	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	5,67	0,010	47%	0,28	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	5,67	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	5,67	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	5,67	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	5,67	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	5,67	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	5,67	0,010	15%	0,03	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	5,67	0,100	25%	0,18	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	5,67	0,010	31%	0,04	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	5,67	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	5,67	0,010	36%	0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	5,67	0,010	33%	0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	5,67	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	5,67	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	5,67	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	5,67	0,100	55%	0,08	
41		Methyl-parathion	GC-MS	ANNEX C	5,67	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	5,67	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	5,81	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	5,81	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	5,81	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	5,81	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	5,81	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	5,81	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	5,81	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	5,81	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	5,81	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	5,81	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	5,81	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	5,81	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	5,81	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	5,81	0,3	indicative	<0,3	

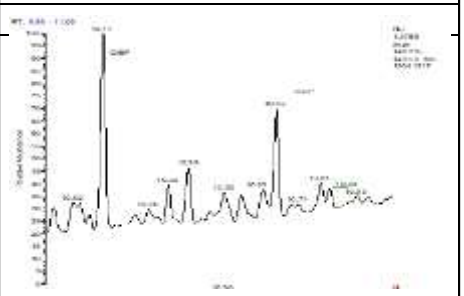
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	5,81	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	5,81	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	5,81	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	5,81	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	5,81	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	5,81	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,051	20%	<0,0051	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	0,063	20%	0,063	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,20	20%	<0,0059	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,058	20%	<0,018	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	0,12	20%	0,12	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,23	20%	<0,023	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,23	20%	<0,023	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,34	20%	<0,034	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	0,08	20%	0,008	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	0,12	20%	0,012	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,15	20%	<0,015	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	0,16	20%	0,016	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,36	20%	<0,0036	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,36	20%	<0,0036	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,36	20%	<0,0036	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,4	20%	<0,00043	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,4	20%	<0,00043	
		Total (upper bound)						0,35	

2.5.14. SAMPLE 14 - 181106-0015

VITO code	181106-0015
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Store brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,78	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,78	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	4,62	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	4,62	0,010	27%	0,08	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	4,62	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	4,62	0,010	16%	0,21	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	4,62	0,010	47%	0,10	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	4,62	0,010	41%	0,04	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	4,62	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	4,62	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	4,62	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	4,62	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	4,62	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	4,62	0,100	25%	<0,1	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	4,62	0,010	31%	0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	4,62	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	4,62	0,010	36%	0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	4,62	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	4,62	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	4,62	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	4,62	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	4,62	0,100	55%	0,07	
41		Methyl-parathion	GC-MS	ANNEX C	4,62	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	4,62	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	4,93	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	4,93	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	4,93	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	4,93	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	4,93	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	4,93	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	4,93	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	4,93	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	4,93	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	4,93	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	4,93	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	4,93	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	4,93	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	4,93	0,3	indicative	<0,3	

		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	4,93	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	4,93	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	4,93	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	4,93	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	4,93	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	4,93	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,058	20%	<0,0058	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,061	20%	<0,061	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,066	20%	<0,0020	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,066	20%	<0,020	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,095	20%	<0,095	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,048	20%	<0,0048	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,043	20%	<0,0043	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,047	20%	<0,0047	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,039	20%	<0,0039	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,063	20%	<0,0063	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,048	20%	<0,0048	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,056	20%	<0,0056	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,40	20%	<0,0040	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,40	20%	<0,0040	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,40	20%	<0,0040	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,6	20%	<0,00048	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,6	20%	<0,00048	
		Total (upper bound)						<0,23	

2.5.15. SAMPLE 15 - 181106-0016

VITO code	181106-0016
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Bio brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,56	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,56	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	4,59	0,010	13%	0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	4,59	0,010	27%	0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	4,59	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	4,59	0,010	16%	0,08	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	4,59	0,010	47%	0,01	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	4,59	0,010	41%	0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	4,59	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	4,59	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	4,59	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	4,59	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	4,59	0,010	15%	0,02	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	4,59	0,100	25%	< 0,1	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	4,59	0,010	31%	0,02	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	4,59	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	4,59	0,010	36%	<0,1	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	4,59	0,010	33%	0,02	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	4,59	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	4,59	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	4,59	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	4,59	0,100	55%	0,10	
41		Methyl-parathion	GC-MS	ANNEX C	4,59	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	4,59	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	4,64	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	4,64	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	4,64	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	53%	0,025	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	4,64	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	4,64	0,3	indicative	<0,3	

		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	4,64	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	4,64	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	4,64	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	4,64	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	4,64	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	4,64	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,064	20%	<0,0064	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,067	20%	<0,067	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,073	20%	<0,0022	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,073	20%	<0,022	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,10	20%	<0,10	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	0,078	20%	0,0078	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	0,053	20%	0,0053	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,051	20%	<0,0051	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	0,057	20%	0,0057	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	0,17	20%	0,017	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	0,19	20%	0,019	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	0,085	20%	0,0085	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,44	20%	<0,0044	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,44	20%	<0,0044	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,44	20%	<0,0044	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,8	20%	<0,00053	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,8	20%	<0,00053	
		Total (upper bound)						0,29	

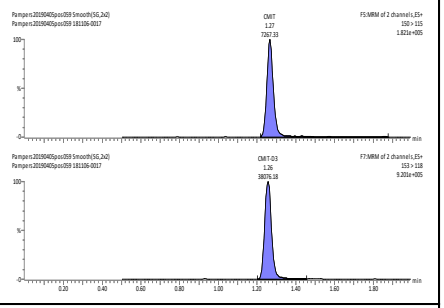
2.5.16. SAMPLE 16 - 181106-0017

Lot number	188/180327
Origin	[redacted]
Amount in package	
Description	
Brand	
Type	Bio brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	organic cotton cover, plastic free, perfume free and chlorine free
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(k=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	3,15	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	3,15	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	3,04	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	3,04	0,010	27%	0,06	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	3,04	0,010	24%	0,02	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	3,04	0,010	16%	0,23	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	3,04	0,010	47%	0,14	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	3,04	0,010	41%	0,06	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	3,04	0,010	33%	0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	3,04	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	3,04	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	3,04	0,010	16%	0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	3,04	0,010	15%	0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	3,04	0,100	25%	0,14	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	3,04	0,010	31%	0,02	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	3,04	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	3,04	0,010	36%	0,03	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	3,04	0,010	33%	0,05	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	3,04	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	3,04	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	3,04	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	3,04	0,100	55%	0,08	
41		Methyl-parathion	GC-MS	ANNEX C	3,04	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	3,04	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	4,64	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	4,64	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	4,64	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	4,64	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	23%	0,081	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	23%	0,14	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	4,64	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	4,64	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	4,64	0,3	indicative	<0,3	

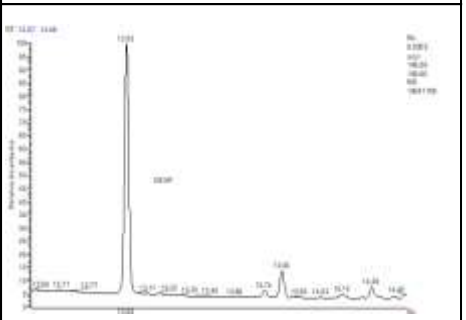
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	4,64	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	4,64	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	4,64	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	4,64	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	4,64	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	4,64	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
89		OCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
90		OCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
		Total (upper bound)							

2.5.17. SAMPLE 17 - 181106-0018

VITO code	181106-0018
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Store brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,47	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,47	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,25	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,25	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,25	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,25	0,010	16%	< 0,01	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,25	0,010	47%	< 0,01	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,25	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,25	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,25	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,25	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,25	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,25	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,25	0,100	25%	0,35	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,25	0,010	31%	0,02	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,25	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,25	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,25	0,010	33%	0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,25	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,25	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,25	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,25	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	2,25	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,25	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	4,21	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	4,21	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	4,21	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	4,21	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	4,21	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	4,21	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	4,21	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	4,21	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	4,21	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	4,21	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	4,21	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	4,21	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	4,21	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	4,21	0,3	indicative	<0,3	

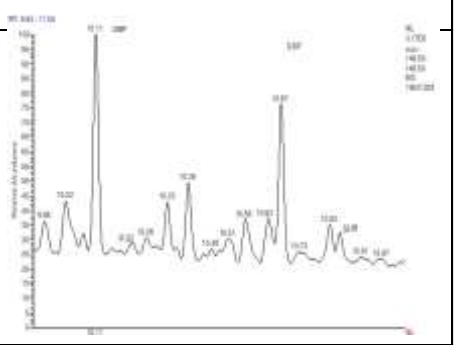
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	4,21	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	4,21	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	4,21	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	4,21	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	4,21	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	4,21	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,052	20%	<0,0052	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,055	20%	<0,055	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,059	20%	<0,0018	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,059	20%	<0,018	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,085	20%	<0,085	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,043	20%	<0,0043	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,039	20%	<0,0039	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,042	20%	<0,0042	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,035	20%	<0,0035	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,056	20%	<0,0056	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,043	20%	<0,0043	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,050	20%	<0,0050	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,36	20%	<0,0036	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,36	20%	<0,0036	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,36	20%	<0,0036	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,4	20%	<0,00043	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,4	20%	<0,00043	
		Total (upper bound)						<0,21	

2.5.18. SAMPLE 18 - 181106-0019

VITO code	181106-0019
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Big brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	6,18	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	6,18	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	6,12	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	6,12	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	6,12	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	6,12	0,010	16%	0,24	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	6,12	0,010	47%	0,19	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	6,12	0,010	41%	< 0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	6,12	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	6,12	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	6,12	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	6,12	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	6,12	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	6,12	0,100	25%	< 0,1	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	6,12	0,010	31%	0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	6,12	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	6,12	0,010	36%	0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	6,12	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	6,12	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	6,12	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	6,12	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	6,12	0,100	55%	0,10	
41		Methyl-parathion	GC-MS	ANNEX C	6,12	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	6,12	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	5,52	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	5,52	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	5,52	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	5,52	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	5,52	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	5,52	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	5,52	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	5,52	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	5,52	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	5,52	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	5,52	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	24%	0,049	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	23%	0,02	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	5,52	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	5,52	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	5,52	0,3	indicative	<0,3	

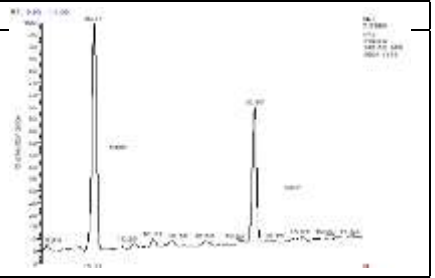
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	5,52	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	5,52	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	5,52	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	5,52	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	5,52	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	5,52	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,048	20%	<0,0048	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,051	20%	<0,051	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,055	20%	<0,0016	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,055	20%	<0,016	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,079	20%	<0,079	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,040	20%	<0,0040	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,036	20%	<0,0036	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,039	20%	<0,0039	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,032	20%	<0,0032	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,052	20%	<0,0052	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,040	20%	<0,0040	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,047	20%	<0,0047	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,33	20%	<0,0033	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,33	20%	<0,0033	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,33	20%	<0,0033	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,3	20%	<0,00040	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,3	20%	<0,00040	
		Total (upper bound)						<0,19	

2.5.19. SAMPLE 19 - 181106-0020

VITO code	181106-0020
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Big brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	5,40	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	5,40	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	5,19	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	5,19	0,010	27%	0,06	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	5,19	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	5,19	0,010	16%	0,20	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	5,19	0,010	47%	0,08	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	5,19	0,010	41%	0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	5,19	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	5,19	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	5,19	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	5,19	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	5,19	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	5,19	0,100	25%	0,29	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	5,19	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	5,19	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	5,19	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	5,19	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	5,19	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	5,19	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	5,19	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	5,19	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	5,19	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	5,19	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	5,03	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	5,03	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	5,03	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	5,03	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	5,03	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	5,03	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	5,03	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	5,03	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	5,03	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	5,03	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	5,03	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	23%	0,046	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	5,03	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	5,03	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	5,03	0,3	indicative	<0,3	

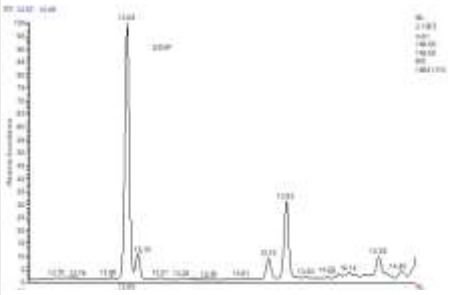
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	5,03	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	5,03	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	5,03	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	5,03	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	5,03	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	5,03	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,073	20%	<0,0073	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,078	20%	<0,078	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,084	20%	<0,0025	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,084	20%	<0,025	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,12	20%	<0,12	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,061	20%	<0,0061	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,055	20%	<0,0055	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,059	20%	<0,0059	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,049	20%	<0,0049	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,080	20%	<0,0080	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,061	20%	<0,0061	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,071	20%	<0,0071	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,51	20%	<0,0051	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,51	20%	<0,0051	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,051	20%	<0,0051	
89		OCDF	GC-HRMS	ANNEX G	*5*	<2,0	20%	<0,00061	
90		OCDD	GC-HRMS	ANNEX G	*5*	<2,0	20%	<0,00061	
		Total (upper bound)						<0,29	

2.5.20. SAMPLE 20 - 181106-0021

VITO code	181106-0021
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Big brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(k=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,51	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,51	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,17	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,17	0,010	27%	0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,17	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,17	0,010	16%	< 0,01	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,17	0,010	47%	0,03	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,17	0,010	41%	0,02	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,17	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,17	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,17	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,17	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,17	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,17	0,100	25%	0,12	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,17	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,17	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,17	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,17	0,010	33%	< 0,01	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,17	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,17	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,17	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,17	0,100	55%	< 0,01	
41		Methyl-parathion	GC-MS	ANNEX C	2,17	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,17	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	4,51	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	4,51	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	4,51	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	4,51	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	4,51	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	4,51	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	4,51	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	4,51	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	4,51	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	4,51	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	4,51	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	4,51	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	4,51	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	4,51	0,3	indicative	<0,3	

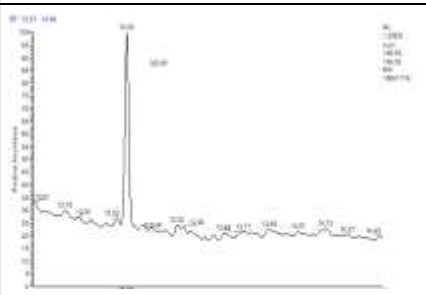
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	4,51	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	4,51	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	4,51	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	4,51	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	4,51	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	4,51	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,056	20%	<0,0056	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,059	20%	<0,059	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,064	20%	<0,0019	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,064	20%	<0,019	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,091	20%	<0,091	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,046	20%	<0,0046	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,042	20%	<0,0042	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,045	20%	<0,0045	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,037	20%	<0,0037	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,060	20%	<0,0060	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,046	20%	<0,0046	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,054	20%	<0,0054	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,39	20%	<0,0039	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,39	20%	<0,0039	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,39	20%	<0,0039	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,5	20%	<0,00046	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,5	20%	<0,00046	
		Total (upper bound)						<0,22	

2.5.21. SAMPLE 21 - 181212-0001

VITO code	181212-0001
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Bio brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	sanitary pad
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(k=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,00	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,00	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	3,98	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	3,98	0,010	27%	0,02	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	3,98	0,010	24%	0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	3,98	0,010	16%	0,02	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	3,98	0,010	47%	0,04	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	3,98	0,010	41%	0,06	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	3,98	0,010	33%	0,04	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	3,98	0,010	24%	0,02	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	3,98	0,010	19%	0,02	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	3,98	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	3,98	0,010	15%	0,02	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	3,98	0,100	25%	0,67	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	3,98	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	3,98	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	3,98	0,010	36%	0,02	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	3,98	0,010	33%	0,05	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	3,98	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	3,98	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	3,98	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	3,98	0,100	55%	0,03	
41		Methyl-parathion	GC-MS	ANNEX C	3,98	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	3,98	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

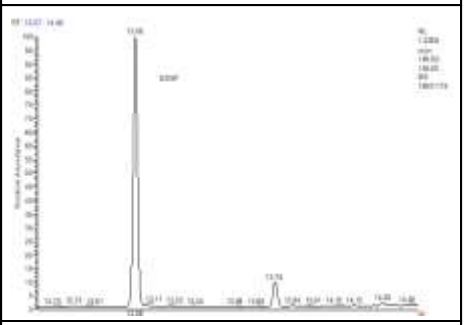
#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	3,87	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	3,87	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	3,87	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	3,87	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	3,87	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	3,87	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	3,87	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	3,87	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	3,87	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	3,87	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	3,87	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	3,87	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	3,87	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	3,87	0,3	indicative	<0,3	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	3,87	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	3,87	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	3,87	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	3,87	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	3,87	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	3,87	0,10	30%	<0,10	

2.5.22. SAMPLE 22 - 181212-0002

VITO code	181212-0002
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Bio brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	[redacted]
Pictures	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,98	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,98	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,44	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,44	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,44	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,44	0,010	16%	< 0,01	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,44	0,010	47%	0,07	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,44	0,010	41%	0,01	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,44	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,44	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,44	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,44	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,44	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,44	0,100	25%	0,31	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,44	0,010	31%	0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,44	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,44	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,44	0,010	33%	0,02	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,44	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,44	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,44	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,44	0,100	55%	0,02	
41		Methyl-parathion	GC-MS	ANNEX C	2,44	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,44	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	5,31	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	5,31	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	5,31	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	5,31	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	5,31	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	5,31	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	5,31	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	5,31	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	5,31	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	5,31	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	5,31	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	5,31	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	5,31	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	5,31	0,3	indicative	<0,3	

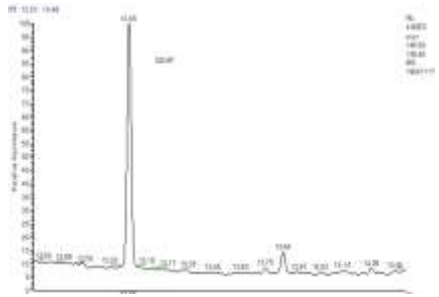
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	5,31	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	5,31	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	5,31	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	5,31	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	5,31	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	5,31	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,046	20%	<0,0046	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,049	20%	<0,049	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,053	20%	<0,0016	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,053	20%	<0,016	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,076	20%	<0,076	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,039	20%	<0,0039	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	0,039	20%	0,0039	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,037	20%	<0,0037	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,031	20%	<0,0031	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	0,059	20%	0,0059	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,039	20%	<0,0039	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,045	20%	<0,0045	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,32	20%	<0,0032	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,32	20%	<0,0032	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,32	20%	<0,0032	
89		OCDF	GC-HRMS	ANNEX G	*5*	<1,3	20%	<0,00039	
90		OCDD	GC-HRMS	ANNEX G	*5*	<1,3	20%	<0,00039	
		Total (upper bound)						0,19	

2.5.23. SAMPLE 23 - 190214-0099

VITO code	190214-0099
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	Store brand
Store of purchase	[redacted]
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	
Pictures	[redacted]

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,22	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,22	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,01	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,01	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,01	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,01	0,010	16%	< 0,01	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,01	0,010	47%	0,05	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,01	0,010	41%	0,02	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,01	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,01	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,01	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,01	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,01	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,01	0,100	25%	0,20	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,01	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,01	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,01	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,01	0,010	33%	0,02	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,01	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,01	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,01	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,01	0,100	55%	0,01	
41		Methyl-parathion	GC-MS	ANNEX C	2,01	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,01	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	3,99	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	3,99	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	3,99	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	3,99	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	3,99	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	3,99	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	3,99	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	3,99	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	3,99	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	3,99	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	3,99	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	3,99	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	3,99	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	3,99	0,3	indicative	<0,3	

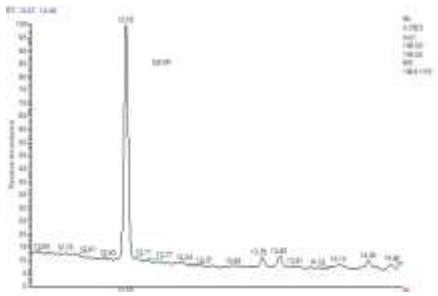
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	3,99	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	3,99	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	3,99	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	3,99	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	3,99	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	3,99	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	<0,099	20%	<0,0099	
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	<0,10	20%	<0,10	
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,11	20%	<0,0034	
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	<0,11	20%	<0,034	
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	<0,16	20%	<0,16	
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,083	20%	<0,0083	
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,075	20%	<0,0075	
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	<0,080	20%	<0,0080	
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	<0,066	20%	<0,0066	
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,11	20%	<0,011	
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	<0,083	20%	<0,0083	
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	<0,097	20%	<0,00097	
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	<0,69	20%	<0,0069	
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	<0,69	20%	<0,0069	
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	<0,69	20%	<0,0069	
89		OCDF	GC-HRMS	ANNEX G	*5*	<2,8	20%	<0,00083	
90		OCDD	GC-HRMS	ANNEX G	*5*	<2,8	20%	<0,00083	
		Total (upper bound)						<0,40	

2.5.24. SAMPLE 24 - 190225-0078

VITO code	190225-0078
Lot number	[redacted]
Origin	
Amount in package	
Description	
Brand	
Type	
Store of purchase	
Date of purchase	
Price (euro)	
Sanitary product class	tampon
Composition (according to label)	[redacted]
Pictures	

#		Name	Analytical method	details of the method	Intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(k=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,92	0,001	35%	<0,01	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	4,92	0,001	58%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
3	PAH	Naphthalene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
4		Acenaphthylene	GC-MS	ANNEX B	6,89	0,010	22%	<0,01	
5		acenaphthene	GC-MS	ANNEX B	6,89	0,010	19%	<0,01	
6		fluorene	GC-MS	ANNEX B	6,89	0,010	21%	<0,01	
7		Phenanthrene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
8		anthracene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
9		fluoranthene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
10		pyrene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
11		B(a)anthracene	GC-MS	ANNEX B	6,89	0,010	36%	<0,01	
12		chrysene	GC-MS	ANNEX B	6,89	0,010	23%	<0,01	
13		B(b)fluoranthene	GC-MS	ANNEX B	6,89	0,010	42%	<0,01	
14		B(k)fluoranthene	GC-MS	ANNEX B	6,89	0,010	25%	<0,01	
15		B(j)fluoranthene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
16		B(e)pyrene	GC-MS	ANNEX B	6,89	0,010	39%	<0,01	
17		B(a)pyrene	GC-MS	ANNEX B	6,89	0,010	35%	<0,01	
18		ind(123cd)pyrene	GC-MS	ANNEX B	6,89	0,010	29%	<0,01	
19		diB(ah)anthracene	GC-MS	ANNEX B	6,89	0,010	30%	<0,01	
20		B(ghi)perylene	GC-MS	ANNEX B	6,89	0,010	14%	<0,01	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
21	Phthalates, TCPP, methyparathion, isosorbide	Dimethyl phthalate (DMP)	GC-MS	ANNEX C	2,57	0,010	13%	< 0,01	
22		Diethyl phthalate (DEP)	GC-MS	ANNEX C	2,57	0,010	27%	< 0,01	
23		Di-n-propyl phthalate (DPrP)	GC-MS	ANNEX C	2,57	0,010	24%	< 0,01	
24		Diisobutyl phthalate (DIBP)	GC-MS	ANNEX C	2,57	0,010	16%	0,02	
25		Di-n-butyl phthalate (DBP)	GC-MS	ANNEX C	2,57	0,010	47%	0,06	
26		Benzyl butyl phthalate (BBP)	GC-MS	ANNEX C	2,57	0,010	41%	0,03	
27		Diisopentyl phthalate (DIPP)	GC-MS	ANNEX C	2,57	0,010	33%	< 0,01	
28		Pentyl isopentyl phthalate (PIPP)	GC-MS	ANNEX C	2,57	0,010	24%	< 0,01	
29		Di-n-pentyl phthalate (DPP)	GC-MS	ANNEX C	2,57	0,010	19%	< 0,01	
30		Diisohexyl phthalate (DIHxP)	GC-MS	ANNEX C	2,57	0,010	16%	< 0,01	
31		Di-n-hexyl phthalate (DHxP)	GC-MS	ANNEX C	2,57	0,010	15%	< 0,01	
32		Diethylhexyl phthalate (DEHP)	GC-MS	ANNEX C	2,57	0,100	25%	0,67	
33		Dicyclohexyl phthalate (DCHP)	GC-MS	ANNEX C	2,57	0,010	31%	< 0,01	
34		Diisoheptyl phthalate (DIHpP)	GC-MS	ANNEX C	2,57	0,100	-	< 0,1	
35		Di-n-heptyl phthalate (DHpP)	GC-MS	ANNEX C	2,57	0,010	36%	< 0,01	
36		Di-n-octyl phthalate (DOP)	GC-MS	ANNEX C	2,57	0,010	33%	0,02	
37		Diisononyl phthalate (DINP)	GC-MS	ANNEX C	2,57	0,100	-	< 0,1	
38		Diisodecyl phthalate (DIDP)	GC-MS	ANNEX C	2,57	0,100	-	< 0,1	
39		Diisoundecyl phthalate (DIUP)	GC-MS	ANNEX C	2,57	0,010	-	< 0,1	
40		Di-n-undecyl phthalate (DUP)	GC-MS	ANNEX C	2,57	0,100	55%	0,01	
41		Methyl-parathion	GC-MS	ANNEX C	2,57	0,100	43%	< 0,1	
42		Tris(2-chloro-1-methylethyl)phosphate (TCPP)	GC-MS	ANNEX C	2,57	interference	interference	interference	
44		Isosorbide	GC-MS	ANNEX C	ND	ND	ND	ND	

#		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
45	biocides, phenolic compounds and parabens and PFOA	Methylparaben	LC-MS/MS (ESI-)	ANNEX D	4,77	0,01	36%	<0,01	
46		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	4,77	0,01	21%	<0,01	
47		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	4,77	0,01	25%	<0,01	
48		Butylparaben	LC-MS/MS (ESI-)	ANNEX D	4,77	0,01	37%	<0,01	
49		4-t-octylfenol	LC-MS/MS (ESI-)	ANNEX D	4,77	0,01	41%	<0,01	
50		Nonylfenol	LC-MS/MS (ESI-)	ANNEX D	4,77	0,05	49%	<0,05	
51		Bisfenol S	LC-MS/MS (ESI-)	ANNEX D	4,77	0,01	19%	<0,01	
52		Dodecylfenol	LC-MS/MS (ESI-)	ANNEX D	4,77	0,01	28%	<0,01	
53		Dichlorophene	LC-MS/MS (ESI-)	ANNEX D	4,77	0,01	41%	<0,01	
54		Triclosan	LC-MS/MS (ESI-)	ANNEX D	4,77	0,05	40%	<0,05	
55		PFOA	LC-MS/MS (ESI-)	ANNEX D	4,77	0,05	42%	<0,05	
56	biocides and caprolactam	6-Caprolactam	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	24%	<0,01	
57		MIT	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	23%	<0,01	
58		Methamidophos	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	56%	<0,01	
59		CMIT	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	23%	<0,01	
60		BIT	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	53%	<0,01	
61		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	29%	<0,01	
62		OIT	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	59%	<0,01	
63		Monocrotophos	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	42%	<0,01	
64		Sebutylazine	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	46%	<0,01	
65		Terbutylazine	LC-MS/MS (ESI+)	ANNEX E	4,77	0,01	27%	<0,01	
66		C10DADMA	LC-MS/MS (ESI+)	ANNEX E	4,77	0,04	40%	<0,04	
67		Azithromycine	LC-MS/MS (ESI+)	ANNEX E	4,77	0,3	indicative	<0,3	

		Name	Analytical method	details of the method	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
68	BTEX	Benzene	headspace GC-MS	ANNEX F	4,77	0,10	35%	<0,10	
69		Toluene	headspace GC-MS	ANNEX F	4,77	0,10	30%	<0,10	
70		Ethylbenzene	headspace GC-MS	ANNEX F	4,77	0,10	20%	<0,10	
71		m+p-xylene	headspace GC-MS	ANNEX F	4,77	0,10	24%	<0,10	
72		o-xylene	headspace GC-MS	ANNEX F	4,77	0,10	24%	<0,10	
73		Styrene	headspace GC-MS	ANNEX F	4,77	0,10	30%	<0,10	
		Name	Analytical method	details of the method	intake used (part) for analysis (g)	ng/kg	measurement uncertainty U(*k=2*)	results ng TEQ/kg	chromatogram (positive result)
74	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
75		2,3,7,8-TCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
76		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
77		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
78		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
79		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
80		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
81		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
82		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
83		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
84		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
85		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
86		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
87		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
88		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
89		OCDF	GC-HRMS	ANNEX G	*5*	ND	20%		
90		OCDD	GC-HRMS	ANNEX G	*5*	ND	20%		
		Total (upper bound)							

2.6. SUMMARY OF THE RESULTS

An overview of the detected target analytes (above LOQ) in the tampons and sanitary pads is given in Table 4. Only the following compounds have been detected:

- Nonylphenol
- MIT, CMIT
- PCDD/F
- Glyphosate, AMPA
- Caprolactam
- Phthalates, with predominance of DIBP, DBP and DEHP
- Methamidophos

The concentrations are low, not exceeding 1 mg/kg. Phthalates are the most frequently detected compounds, present in nearly all samples in minor concentrations. Caprolactam has been detected in 2 samples as well as nonylphenol and MIT. CMIT was only detected in one sample as well as methamidophos.

Although PCDD/F congeners have been detected above the reporting limit in some tampons and sanitary pads the significance is negligible. Total PCDD/F TEQ (toxicity equivalent) values have been calculated for each sample using the WHO TEF values given in Table 5. The upper bound principle has been applied, which means that the total TEQ value has been calculated by adding all congener TEQs including the reporting limits (<-values). Total TEQ values are summarized in Table 6. These total TEQ values range for all samples but one, from 0.1 to 0.4 ng TEQ/kg and no significant higher TEQ values are observed for the positive samples. Remark that for 1 tampon a 10 times higher total TEQ value is reported, namely Sample 8, but this is due to interferences, most probably from superabsorber, necessitating smaller intake and hence higher congener reporting limits.

Table 4: Overview of positively identified organic compounds in tampons (T) and sanitary pads (S)

Sample 1

Some phthalates	<0,1	mg/kg
Phthalate DEHP	0,32	mg/kg

Sample 2

Phthalate DIBP	0,35	mg/kg
Phthalate DBP	0,22	mg/kg
Phthalate DEHP	0,12	mg/kg
Nonylphenol	0,40	mg/kg

Sample 3

Glyphosate	0,07	mg/kg
AMPA	0,25	mg/kg
Some phthalates	<0,1	mg/kg
Phthalate DEHP	0,60	mg/kg
MIT	0,36	mg/kg

Sample 4

Some phthalates	<0,1	mg/kg
Phthalate DEHP	0,30	mg/kg
Phthalate DBP	0,13	mg/kg
6-caprolactam	0,35	mg/kg
MIT	0,15	mg/kg
Methamidophos	0,04	mg/kg

Sample 5

Phtalate DBP	0,16	mg/kg
Phtalate DEHP	0,39	mg/kg

Sample 6

Phthalate DEP	0,04	mg/kg
Phthalate DIBP	0,16	mg/kg
Phthalate DBP	0,10	mg/kg

Sample 7

Phthalate DBP	0,02	mg/kg
Phthalate DEHP	0,13	mg/kg

Sample 8

Phthalate DIBP	0,03	mg/kg
Phthalate DBP	0,02	mg/kg
Phthalate DEHP	0,15	mg/kg

Sample 9

All below LOQ	-	mg/kg

Sample 10

Glyphosate	0,05	mg/kg
AMPA	0,08	mg/kg
Some phthalates	<0,1	mg/kg

Sample 11

Phthalate DEP	0,67	mg/kg
Phthalate DIBP	0,32	mg/kg
Phthalate DBP	0,18	mg/kg
Some phthalates	<0,1	mg/kg
Nonylphenol	0,92	mg/kg

Sample 12

Some phthalates	<0,1	mg/kg
PCDD/F	0,14	ng TEQ/kg

Sample 13

Some phthalates	<0,1	mg/kg
Phthalate DIBP	0,57	mg/kg
Phthalate DBP	0,28	mg/kg
Phthalate DEHP	0,18	mg/kg
PCDD/F	0,35	ng TEQ/kg

Sample 14

Some phthalates	<0,1	mg/kg
Phthalate DIBP	0,21	mg/kg
Phthalate DBP	0,10	mg/kg

Sample 15

Some phthalates	<0,1	mg/kg
Phthalate DUP	0,10	mg/kg
PCDD/F	0,29	ng TEQ/kg

Sample 16

Some phthalates	<0,1	mg/kg
Phthalate DIBP	0,23	mg/kg
Phthalate DBP	0,14	mg/kg
Phthalate DEHP	0,14	mg/kg
CMIT	0,14	mg/kg

Sample 17

Some phthalates	<0,1	mg/kg
Phthalate DEHP	0,35	mg/kg

Sample 18

Some phthalates	<0,1	mg/kg

Phthalate DIBP	0,24	mg/kg
Phthalate DBP	0,19	mg/kg
Phthalate DUP	0,10	mg/kg
MIT	0,02	mg/kg
6-caprolactam	0,05	mg/kg

Sample 19

Some phthalates	<0,1	mg/kg
Phthalate DIBP	0,20	mg/kg
Phthalate DEHP	0,29	mg/kg

Sample 20

Some phthalates	<0,1	mg/kg
Phthalate DEHP	0,12	mg/kg

Sample 21

Some phthalates	<0,1	mg/kg
Phthalate DEHP	0,67	mg/kg
PCDD/F	0,28	ng TEQ/kg

Sample 22

Some phthalates	<0,1	mg/kg
Phthalate DEHP	0,67	mg/kg
PCDD/F	0,31	ng TEQ/kg

Sample 23

Some phthalates	<0,1	mg/kg
Phthalate DEHP	0,20	mg/kg

Sample 24

Some phthalates	<0,1	mg/kg
Phthalate DEHP	0,67	mg/kg

Table 5: WHO toxicity equivalent factors (TEF)

	TEF
2,3,7,8-TCDF	0,1
2,3,7,8-TCDD	1
1,2,3,7,8-PeCDF	0,03
2,3,4,7,8-PeCDF	0,3
1,2,3,7,8-PeCDD	1
1,2,3,4,7,8-HxCDF	0,1
1,2,3,6,7,8-HxCDF	0,1
2,3,4,6,7,8-HxCDF	0,1
1,2,3,7,8,9-HxCDF	0,1
1,2,3,4,7,8-HxCDD	0,1
1,2,3,6,7,8-HxCDD	0,1
1,2,3,7,8,9-HxCDD	0,1
1,2,3,4,6,7,8-HpCDF	0,01
1,2,3,4,7,8,9-HpCDF	0,01
1,2,3,4,6,7,8-HpCDD	0,01
OCDF	0,0003
OCDD	0,0003

Table 6: Measured PCDD/F total TEQ values and reporting limits (upper bound)

VITO code	Sample	Type	PCDD/F ng TEQ/kg
181106-0002	1	T	<0,31
181106-0003	2	T	<0,20
181106-0004	3	T	<0,25
181106-0005	4	S	<0,12
181106-0006	5	T	<0,21
181106-0007	6	S	<0,11
181106-0008	7	T	<0,29
181106-009	8	T	**<2,5**
181106-0010	9	T	<0,14
181106-0011	10	S	-
181106-0012	11	S	-
181106-0013	12	S	0,14
181106-0014	13	S	0,35
181106-0015	14	S	<0,23
181106-0016	15	S	0,29
181106-0017	16	S	-
181106-0018	17	T	<0,21
181106-0019	18	S	<0,19
181106-0020	19	S	<0,29
181106-0021	20	T	<0,22
181212-0001	21	S	0,28
181212-0002	22	T	0,19
190214-0099	23	T	<0,40
190225-0078	24	T	-

2.7. METHOD UNCERTAINTY U (*k=2*)

The uncertainty is calculated using the trueness (executing spiking experiments) and precision of the method (executing replicate determinations of the same sample or duplicate determinations of different samples in different analytical series). Near the lower limit of quantification the method uncertainty will be higher. The coefficient of variation (CV), the average bias (b) and the measurement uncertainty (U) were calculated according to the equations below;

$$CV(sbetween) = \frac{\sqrt{\frac{\sum_{i=1}^{n}(xi-\bar{x})^2}{n-1}}}{\bar{x}} * 100\%$$ *in case of replicate determinations of same sample*

or

$$CV(sbetween) = \frac{1}{\sqrt{2}}\sqrt{\frac{\sum_{i=1}^{n}\left(\frac{x_{i1}-x_{i2}}{0.5(x_{i1}+x_{i2})}\right)^2}{n}} * 100\%$$ *in case of duplicate determinations of different samples*

CV	coefficient of variation in %
n	amount of samples (n=5)
x_{i1}	results of series 1
x_{i2}	results of series 2
$\bar{x}$	average value

$$b = \frac{\sum_{i=1}^{n} b_i}{n}$$

b_i	mean bias of sample i, in %
n	amount of samples

$$U\ (k=2) = |b| + 2\sqrt{(CV_{Sbetween})^2}$$

In general the average measurement uncertainties for all compounds were lower than 60% percent. If higher measurement uncertainties were noticed, due to interferences or matrix influences, no results were reported (NR). This was the case for methamidophos, the phthalate DINP and toluene.

CHAPTER 3 CONCLUSION

In this analytical study the concentrations of 90 selected organic substances of concern have been determined in tampons and sanitary pads which are placed on the Belgian market. The results show that for most of the selected compounds the concentrations are below the limit of quantification. Other compounds were detected but the concentrations were (very) low (below 1 mg/kg*).

The most frequently detected compounds are phthalates, with a predominance of DBP, DIBP and DEHP. These plasticisers have been widely used and are ubiquitous in the environment. The observed contamination can be considered to be" historical".

Caprolactam was detected in 2 samples. A possible source of caprolactam are nylon threads. Caprolactam is very soluble in water (53%, NIOSH). It has a high oral LD50 (2 g/kg bw, rhodents, PUBCHEM); it is not suspected to be a carcinogen, but it can cause skin irritation. However the concentrations that were found are low and therefore caprolactam is considered not to be a compound of concern.

Nonylphenol has also been detected in 2 samples. This compound is known to be a endrocine disrupter. The presence of nonylphenol most probably originates from the use of nonylphenolethoxylates, which are surfactants used for cleaning, surface treatment, emulsification, solubilisation, etc. Another source may be polymer anti-oxidants (e.g. tris(4-nonylphenyl) phosphite (TNPP)). The use of nonylphenol and ethoxylates in household detergents is forbidden in Europe and the compounds have been added to the REACH Annex XIV authorization list. It is clear that the presence of nonylphenol draws attention and that additional measures should be taken to maximally reduce the contamination of tampons and sanitary pads with nonylphenol.

Other compounds that were detected were methyl and chloromethyl isothiazolinone (MIT, CMIT). These biocides are frequently used in personal care products and can cause contact allergy, but again the concentrations are low and therefore these isothiazolinones are not considered to be compounds of concern.

Glyphosate and its metabolite AMPA have been detected in 1 tampon and 1 sanitary pad, however only in concentrations around 0.1 mg/kg. The origin of these compounds in these samples is not clear. Another pesticide detected in one sanitary pad was methamidophos. The maximum residue limit for food is 0.01-0.02 mg/kg depending on food type; the detected concentration was 0.04 mg/kg so that the use of this sanitary pad can be considered to be safe.

As a general conclusion it can be stated that tampons and sanitary pads which are sold on the Belgian market are free of or only contain negligible amounts of the investigated harmful, carcinogenic or reprotoxic chemicals. There is no reason to worry about possible negative health effects following use of tampons or sanitary pads.

**With the exception of isosorbide: see Addendum*

ANNEX A: GLYPHOSATE AFTER DERIVATIZATION WITH LC-MS/MS

→ Sample pre-treatment

Tampons and sanitary pads were cut into pieces and the parts "in contact with the skin" were further mixed to fine and homogenous particles. The extraction was done with ultrasonication for 1 hour. Around 5-10 gram was used for intake (corresponding to 2-3 tampons or one sanitary pad) and the samples were extracted with 200 mL of acidified water (the sample was completely immersed in the extraction solvent).

→ Sample derivatization

To 10 mL of the extract, internal standards, 6M potassium hydroxide, borate buffer and derivatization reagent (FMOC) were added. The derivatization was done for 30 minutes. Afterwards, formic acid, ultrapure water and EDTA solution were added.

→ Sample clean- up

A SPE clean-up was performed using a Oasis HLB cc/200 mg (Waters, Milford, USA) column. The SPE column was conditioned with 5 mL of methanol and 5 mL of 0.1 % formic acid in ultrapure water. A fraction (10 mL) of the sample extract was slowly loaded onto the cartridge. Impurities were washed out with 2 times 5 mL 0.1% formic acid in water and 5 mL dichloromethane. The retained compounds were eluted with 10 mL methanol. The eluate was collected in a 15 mL falcon tube and evaporated under nitrogen to dryness. The residues were dissolved in 100 µL methanol and 900 µL of 5 mM NH_4Ac in water (pH 9) mL and transferred into a LC vial and injected in the UHPLC-MS/MS system.

→ Standards and solutions

Individual stock standard solutions of glyphosate and AMPA and internal standards (^{13}C-glyphosate and ^{13}C-AMPA) were prepared in ultrapure water. Working standard solutions, containing a mixture of either all target compounds or internal standards, were prepared in ultra-pure water by an appropriate dilution of the individual stock solutions. The concentration of the compounds in the working standard solutions ranged from 5 to 250 µg/kg. The internal standards in the working standard solutions and sample extracts amounted to approximately 30 µg/kg.

→ LC-MS/MS method

The instrumental analysis was performed by means of Ultra High Performance Liquid Chromatography (UHPLC)-tandem mass spectrometry using a Waters H-class Acquity UPLC system (Waters, Milford, MA, USA). The UHPLC system consisted of an Acquity quaternary solvent manager, an Acquity sample manager and an Acquity column heater manager. The UHPLC system was coupled to a Waters Xevo TQ-S tandem mass spectrometer, that was operated in the positive electrospray ionization mode (ESI+). The compounds were separated on an Acquity UPLC BEH C18 column (2.1mm×100 mm; 1.7 µm). The column temperature was kept at 40 °C and an injection volume of 10 µL was used. Optimal separation was obtained with a binary mobile phase constituted of 5 mM ammonium acetate in H2O at pH 9 (solvent A) and 5 mM ammonium acetate in methanol pH 9 (solvent B). The flow rate of the mobile phase was 0.35 mL/min. The gradient elution program was

as follows: 0–5 min: 90%-5% A; 5–6 min: 5% A; 6-6.10 min: 5%-90% A; 6.10-8 min: 90% A. A capillary voltage of 3.2 kV was used for all compounds. The source offset was 40 V. The cone voltage and collision energy were compound-dependent (Table below).

	mode	*Parent ion*	*Daughter ion*	*cone V*	*Collision E*	*Rt (min)*	
glyfosaat-FMOC	ESI+	392	179	40	26	3.51	Q
	ESI+	392	88	40	20	3.51	q
C13-glyfosaat-FMOC	ESI+	395	91	40	20	3.51	
AMPA-FMOC	ESI+	334	179	40	23	4.41	Q
	ESI+	334	156	40	8	4.41	q
AMPA 13C 15 N	ESI+	336	158	40	8	4.41	
glufosinaat-FMOC	ESI+	404	136	40	23	5.42	Q
	ESI+	404	182	40	14	5.42	q

→ **Identification and quantification**

Positive identification of the compounds was based on LC retention time match and their specific MRM transitions. Quantification of the individual compounds (glyphosate and AMPA) were done with the isotope dilution method. The relative response factors (RRF) of the compounds in relation to the corresponding internal standard were calculated and used for calibration.

ANNEX B: POLYAROMATIC HYDROCARBONS WITH GC-MS

→ Sample pre-treatment

Tampons and sanitary pads were cut into pieces and the parts "in contact with the skin" were further mixed to fine and homogenous particles. The extraction was done with ultrasonication for 1 - 2 hours. Around 2-5 gram were used for intake and the samples were extracted with 200 mL of aceton/n-hexane (20/80; v/v) (the sample was completely immersed in the extraction solvent). The complete extract was concentrated under nitrogen and solvent exchanged to n-hexane.

→ Sample clean- up

The n-hexane extract was purified using a combined silica/alumina column.After clean-up, the extract was evaporated and concentrated to a final volume of 1 mL toluene. Recovery standards (D10-1-methylnaphtalene and D12-perylene) were added to the final extract.

→ Standards and solutions

A mix stock standard solution of PAHs (naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(j)fluoranthene, benzo(e)pyrene, benzo(a)pyrene, indeno(1,2,3,c,d)pyrene, dibenzo(a,h)anthracene and dibenzo(g,h,i)perylene and internal standards (D8-naphthalene, D8-acenaphthylene, D10-acenaphthene, D10-fluorene, D10-phenanthrene, D10-anthracene, D10-fluoranthene, D10-pyrene, D12-benzo(a)anthracene, D12-chrysene, D12-benzo(b)fluoranthene, D12-benzo(k)fluoranthene, D12-benzo(a)pyrene, D12-indeno(1,2,3,c,d)pyrene, D14-dibenzo(a,h)anthracene and D12-dibenzo(g,h,i)perylene) were prepared in toluene. Working standard solutions, containing a mixture of either all target compounds or internal standards, were prepared in toluene by an appropriate dilution of the individual stock solutions. The concentration of the compounds in the working standard solutions ranged from 0.02 - 4 µg/mL. The internal standards in the working standard solutions and sample extracts amounted to approximately 1 µg/mL .

→ GC-MS method

The quantitative determinations were carried out by means of a gas chromatograph (Trace GC, Thermo) coupled to a mass spectrometer (Trace DSQ, thermo). GC separations were achieved on an VF-17-MS (30 m×0.25 id, 0.25 µm) fused-silica capillary column. The injector mode was splitless (1 min) and a total flow 30 ml min^{-1} was used. The injector temperature was maintained at 300 °C. The GC temperature program was from 75 °C (1 min) to 210 °C at 15 °C min^{-1}, to 320 °C at 5 °C min^{-1} (4 min). The carrier gas was helium (flow rate 1.0 ml min^{-1}). The interface temperature was 310 °C. The analysis was operated in full SCAN mode (segments).

The selected ions for detection and quantification are reported in the Table below.

PAH compounds	*mass*
Naphthtalene	128
Acenaphthylene	152
Acenaphthene	154
Fluorene	166
Phenanthrene	178
Anthracene	178
Fluoranthene	202
Pyrene	202
B(a)anthracene	228
Chrysene	228
B(b)fluoranthene	252
B(k)fluoranthene	252
B(j)fluoranthene	252
B(e)pyrene	252
B(a)pyrene	252
ind(123cd)pyrene	276
diB(ah)anthracene	278
B(ghi)perylene	276
D8-naftalene	136
D8-acenaphtylene	160
D10-acenaphtene	164
D10-fluorene	176
D10-fenanthrene	188
D10-anthracene	188
D10-fluoranthene	212
D10-pyrene	212
D12-B(a)anthracene	240
D12-chrysene	240
D12-B(b)fluoranthene	264
D12-B(k)fluoranthene	264
D12-B(a)pyrene	264
D12-ind(123cd)pyrene	288
D14-diB(ah)anthracene	292
D12-B(ghi)perylene	288
D10-1-methylnaftalene	152
D12-perylene	264

→ **Identification and quantification**

Positive identification of the compounds in the sample extracts was based on GC retention time match and specific ion.

The PAH content in the sample was quantified relative to the corresponding perdeuterated PAH added. The response factors for different compounds were measured by injecting a standard solution containing the target analytes and having the same concentration of perdeuterated PAHs as used for spiking of the sample.

ANNEX C: PHTHALATES, TCPP AND METHYLPARATHION WITH GC-MS

→ Sample pre-treatment

Tampons and sanitary pads were cut into pieces and the parts "in contact with the skin" were further mixed to fine and homogenous particles. The extraction was done with ultrasonication for 2 hours. Around 2-10 gram were used for intake (corresponding to one complete tampon or sanitary towel) and the samples were extracted with 30-100 mL of n-hexane (the sample was completely immersed in the extraction solvent). The complete extract was concentrated under nitrogen to a final volmume of 1 ml. Recovery standard (13C-PCB-180) was added before injection into the GC-MS.

Remarks:

- n-hexane was used as extraction solvent instead of dichloromethane (DCM) because of coextraction of a considerable amount of interfering substances when using DCM. Because isosorbide is not soluble in hexane this compound could not be determined.
- Matrix interferences hampered the determination of TCPP in all samples

→ Standards and solutions

Individual stock standard solutions of phthalates,TCPP, methylparathion and internal standards (dimethylphthalate-D4, diethylphthalate-D4, di-n-butylphthalate-D4, diisobutylphthalate-D4, benzylbutylphthalate-D4, di-n-hexylphthalate-D4, dioctylphthalate-D4) were prepared in n-hexane. Working standard solutions, containing a mixture of either all target compounds or internal standards, were prepared in n-hexane by an appropriate dilution of the individual stock solutions. The concentration of the compounds in the working standard solutions ranged from 0.015 to 2 µg/mL. The internal standards in the working standard solutions and sample extracts amounted to approximately 0.3 µg/mL. PCB-180 was used as recovery standard.

→ GC-MS method

The qualitative and quantitative determinations were carried out by means of a gas chromatograph (Trace GC, Thermo) coupled to a mass spectrometer (Trace DSQ, thermo). GC separations were achieved on an VF-17-MS (30 m×0.25 id, 0.25 µm) fused-silica capillary column. The injector mode was splitless (1 min). The injector temperature was maintained at 250°C. The GC temperature program was from 65°C (1 min) to 320°C (5 min) at 20°C min^{-1}. The total run time was 15 min. The carrier gas was helium (flow rate 1.0 ml min^{-1}). The interface temperature was 250°C. The analysis was operated in full SCAN mode (segments).

The selected ions for detection and quantification are reported in the Table below.

CODE	RT	m1	m2	m3
DMP-D4	8,20	167	81	
DMP	8,22	163	77	
DEP-D4	8,88	153	181	
DEP	8,90	149	177	
DPropP	9,80	149	191	
TCCP	9.85-10.05	125	99	
TCCP	9,90	125	99	
TCCP	9,97	125	99	
TCCP	10,03	125	99	

DIBP-D4	10,10	153	227	
DIBP	10,11	149	223	
DBP-D4	10,65	153	227	
DBP	10,66	149	223	
MP	10,88	125	263	
DIPP	11,05	149	71	237
PIPP	11,05	149	71	237
PIPP	11,27	149	71	237
PIPP	11,47	149	71	237
DPP	11,48	149	71	237
DIHxP	11,86	149	251	
DHxP	12,26	149	251	
DHexP-D4	12,25	153	255	
DEHP	13,06	149	167	279
DEHP-D4*	12,85	153	171	283
BBP	13,11	149	206	
BBP-D4	13,10	153	210	
DHpP	13,21	149	265	
DIHpP	11.8-13.7	149	265	
DOTP	13,75	261	279	
PCB180	13,85	394	396	
DCHP	14,16	149	167	
DOP-D4	14,29	153	283	
DOP	14,29	149	279	
DUP	17,18	149	321	
DINP	13-15.5	149	293	
DIDP	14-16.5	149	307	
DIUP	15.1 - 18	149	321	

**DEHP-D4 was not used as internal standard because it contained non-labelled DEHP*

→ **Identification and quantification**

Positive identification of the compounds in the sample extracts was based on GC retention time match and specific ions.
The content in the sample was quantified relative to the internal standards added. The response factors for different compounds were measured by injecting a standard solution containing the target analytes and having the same concentration of internal standards as used for spiking of the sample. The most abundant ion was used for quantification.

ANNEX D : BIOCIDES, PHENOLIC COMPOUNDS, PARABENS AND PFOA WITH LC-MS/MS

→ Sample pre-treatment

Tampons and sanitary pads were cut into pieces and the parts "in contact with the skin" were further mixed to fine and homogenous particles. Around 5 resp. 10 g were used for intake (corresponding to 2-3 complete tampons or 1 sanitary towel) and the samples were extracted with 100 resp. 200 mL of methanol (the sample was completely immersed in the extraction solvent). The extraction was done with ultrasonication for 1 hour, followed by 1 hour shaking. From the supernatant 10 mL was taken and evaporated under nitrogen to obtain a final volume of 1 mL (MeOH/H2O 1/1 v/v)..

→ Standards and solutions

Individual stock standard solutions of methyl-, ethyl-, propyl and butylparaben, 4-t-octylphenol, nonylphenol, bisphenol S, dodecylphenol, dichlorophen, triclosan and PFOA and internal standards (^{13}C-butylparaben, ^{13}C-4-t-octylphenol, ^{13}C-nonylphenol and ^{13}C-PFOA) were prepared in methanol. Working standard solutions, containing a mixture of either all target compounds or internal standards, were prepared in ultra-pure water/methanol (1/1; v/v) by an appropriate dilution of the individual stock solutions. The concentration of the compounds in the working standard solutions ranged from 0.3 to 65 µg/kg. The internal standards in the working standard solutions and sample extracts amounted to approximately 30 µg/kg.

→ LC-MS/MS method

The instrumental analysis was performed by means of Ultra High Performance Liquid Chromatography (UHPLC)-tandem mass spectrometry using a Waters H-class Acquity UPLC system (Waters, Milford, MA, USA). The UHPLC system consisted of an Acquity quaternary solvent manager, an Acquity sample manager and an Acquity column heater manager. The UHPLC system was coupled to a Waters Xevo TQ-S tandem mass spectrometer, that was operated in the negative electrospray ionization mode (ESI-). The compounds were separated on an Acquity UPLC BEH C18 column (2.1mm×100 mm; 1.7 µm). The column temperature was kept at 40 °C and an injection volume of 10 µL was used. Optimal separation was obtained with a binary mobile phase constituted of 2 mM ammonium acetate in H2O (solvent A) and acetonitrile (solvent B). The flow rate of the mobile phase was 0.4 mL/min. The gradient elution program was as follows: 0–8 min: 80%-5% A; 8–10 min: 5–1% A; 10.1-12 min: 80% A. A capillary voltage of 2.20 kV was used for all compounds. The source offset was 50 V. The cone voltage and collision energy were compound-dependent (Table below).
For triclosan optimal separation was obtained with a binary mobile phase constituted of 5 mM ammonium acetate in H2O (solvent A) and methanol (solvent B). The flow rate of the mobile phase was 0.4 mL/min. The gradient elution program was as follows: 0–4 min: 90%-5% A; 4–10 min: 5% A; 10-12 min: 90% A. A capillary voltage of 2.20 kV was used and the source offset was 30 V.

Compounds	Parent ion	Daughter ion Q	dwell time	cone V	Collision E	ionisation mode	calibration
methylparaben (2.0-3.5min)	151	92	0.018	30	20	ES -	external
ethylparaben (2.0-4.0min)	165	92	0.018	30	20	ES -	external
propylparaben (3.5-5.0min)	179	92	0.018	30	20	ES -	external

butylparaben (4.0-5.5min)	193	92	0.057	30	20	ES -	internal
13C-butylparaben (4.0-5.5min)	199	98	0.057	30	20	ES -	
4-t-octylfenol (6.2-7.5min)	205	133	0.02	30	20	ES -	internal
13C-4-t-octylfenol (6.2-7.5min)	211	139	0.02	30	20	ES -	
Nonylfenol (7.0-9.0min)	219	133	0.02	30	20	ES -	internal
13C-nonylfenol (7.0-9.0min)	225	139	0.02	30	20	ES -	
Bisfenol S (1.5-3.0min)	249	108	0.018	30	20	ES -	internal
dodecylfenol (8.0-10.0min)	261	133	0.127	30	20	ES -	external
dichlorophen (4.5-6.0min)	267	127	0.024	30	20	ES -	external
Triclosan (6.0-7.0min)	289	35	0.03	30	20	ES -	external
PFOA (3.8-5.0min)	413	369	0.018	30	20	ES -	internal
13C-PFOA (3.8-5.0min)	417	372	0.018	30	20	ES -	

→ **Identification and quantification**

Positive identification of the compounds was based on LC retention time match and their specific MRM transitions. Quantification of the individual compounds (butylparaben, 4-t-octylphenol, nonylphenol and PFOA) was done with the isotope dilution method or with the external standard method (dichlorphen, methylparaben, ethylparaben, propylparaben, docdecylphenol, Bisphenol S and triclosan). The relative response factors (RRF) of the compounds in relation to the corresponding internal standards were calculated and used for calibration. For the compounds where no internal standard was available, quantification was done by the external standard calibration method and correction for matrix effects was made by standard addition.

ANNEX E: BIOCIDES AND CAPROLACTAM WITH LC-MS/MS

→ Sample pre-treatment

Tampons and sanitary pads were cut into pieces and the parts "in contact with the skin" were further mixed to fine and homogenous particles. Around 5 resp. 10 g were used for intake (corresponding to 2-3 complete tampons or 1 sanitary towel) and the samples were extracted with 100 resp. 200 mL of methanol (the sample was completely immersed in the extraction solvent). The extraction was done with ultrasonication for 1 hour, followed by 1 hour shaking. From the supernatant 10 mL was taken and evaporated under nitrogen to obtain a final volume of 1 mL (MeOH/H2O 1/1 v/v).

→ Standards and solutions

Individual stock standard solutions of 6-caprolactam, MIT (2-Methyl-4-isothiazolin-3-one), CMIT (5-chloro-2-methyl-4-isothiazolin-3-one), BIT (1,2-Benzisothiazol-3(2H)-one), OIT (Octhilinone), aldicarb, monocrotophos, methamidophos, sebutylazine, terbutylazine, C10DADMA, azithromycine and internal standards (MIT-d_3, CMIT-d_3 and ^{13}C-BIT) were prepared in methanol. Working standard solutions, containing a mixture of either all target compounds or internal standards, were prepared in ultra-pure water/methanol (1/1; v/v) by an appropriate dilution of the individual stock solutions. The concentration of the compounds in the working standard solutions ranged from 0.3 to 65 µg/kg. The internal standards in the working standard solutions and sample extracts amounted to approximately 30 µg/kg.

→ LC-MS/MS method

The instrumental analysis was performed by means of Ultra High Performance Liquid Chromatography (UHPLC)-tandem mass spectrometry using a Waters H-class Acquity UPLC system (Waters, Milford, MA, USA). The UHPLC system consisted of an Acquity quaternary solvent manager, an Acquity sample manager and an Acquity column heater manager. The UHPLC system was coupled to a Waters Xevo TQ-S tandem mass spectrometer, that was operated in the positive electrospray ionization mode (ESI+). The compounds were separated on an Acquity UPLC BEH C18 column (2.1mm×100 mm; 1.7 µm). The column temperature was kept at 40 °C and an injection volume of 10 µL was used. Optimal separation was obtained with a binary mobile phase constituted of ultrapure water (solvent A) and acetonitrile (solvent B). The flow rate of the mobile phase was 0.4 mL/min. Both the solvents are acetified with 0.1% formic acid. The gradient elution program was as follows: 0–8 min: 80%-5% A; 8–10 min: 5–1% A; 10.1-12 min: 80% A. A capillary voltage of 2.00 kV was used for all compounds. The source offset was 30 V. The cone voltage and collision energy were compound-dependent (Table below).
For the determination of C10DADMA the extract was separated on an Acquity UPLC BEH Phenyl column (2.1mm×100 mm; 1.7 µm). The column temperature was kept at 40 °C and an injection volume of 10 µL was used. Optimal separation was obtained with a binary mobile phase constituted of ultrapure water + 20 mM NH4Ac (solvent A) and acetonitrile + 20 mM NH4Ac (solvent B). The flow rate of the mobile phase was 0.4 mL/min. The gradient elution program was as follows: 0–4 min: 50%-5% A; 4–10 min: 5% A; 10-12 min: 50% A.

compounds	*Parent ion*	*Daughter ion Q*	*dwell time*	*cone V*	*Collision E*	*ionisatie mode*	*calibration*
6-Captrolactam (0-10min)	114	79	0.015	30	20	ES +	external
MIT (0.0-5.0min)	116	101	0.015	30	20	ES +	internal
MIT-D3 (0.0-5.0min)	119	102	0.015	30	20	ES +	
methamidophos (0.0-5.0min)	142	94	0.015	30.	20	ES +	external
CMIT (0.0-5.0min)	150	115	0.015	30	20	ES +	internal
CMIT-D3 (0.0-5.0min)	153	118	0.015	30	20	ES +	
BIT (0.0-5.0min)	152	109	0.015	30	20	ES +	internal
BIT-13C (0.0-5.0min)	158	115	0.015	30	20	ES +	
Aldicarb (2.0-3.5min)	208	89	0.034	30	20	ES +	internal
OIT (0.0-10.0min)	214	102	0.037	30	20	ES +	external
monocrotophos (0.0-2.0min)	224	127	0.015	30	20	ES +	external
sebutylazine (4.0-6.0min)	230	96	0.037	30	20	ES +	external
tertutylazine (4.0-6.0min)	230	174	0.037	30	20	ES +	external
azithromycine	749.5	592.4	0.037	30	20	ES+	external
C10DADMA	326	186	0.33	30	40	ES+	external

→ **Identification and quantification**

Positive identification of the compounds was based on LC retention time match and their specific MRM transitions. Quantification of the individual compounds (MIT, CMIT and BIT) were done with the isotope dilution method or with the external standard method (aldicarb, methanmidophos, monocrothophos, sebutylazine, terbutylazine, OIT and 6-caprolactam). The relative response factors (RRF) of the compounds in relation to the corresponding internal standard were calculated and used for calibration. For the compounds where no internal standard was available, quantification was done by the external standard calibration method and correction for matrix effects was made by standard addition..

ANNEX F : MONO-AROMATIC HYDROCARBONS WITH HEADSPACE GC-MS

→ Sample pre-treatment

The diapers were cut into pieces and the parts "in contact with the skin of the baby" were further mixed to fine and homogenous particles. Polyacrylate (or other superadsorbent) grains were removed before extraction. The extraction was done with ultrasonication for 1 hour. Around 10 gram was used for intake (corresponding to 1 diaper) and the diapers were extracted with 200 mL of methanol (the diaper was completely immersed in the extraction solvent). From the extract 630 µL was taken, 4.5 gram of water and internal standards were added before injection to the GC-MS.

→ Standards and solutions

Individual stock standard solutions of benzene, toluene, ethylbenzene, p+m-xylene, styrene, o-xylene, alpha-methylstyrene and internal standards (D6-benzene, D8-toluene and D10-ethylbenzene) were prepared in ultrapure water. Working standard solutions, containing a mixture of either all target compounds or internal standards, were prepared in ultrapure water by an appropriate dilution of the individual stock solutions. The concentration of the compounds in the working standard solutions ranged from 0.4 - 7 mg/kg. The internal standards in the working standard solutions and sample extracts amounted to approximately 1 mg/kg.

→ GC-MS method

The determination of volatile organic compounds (VOCs) in samples is mostly performed using static headspace (SHS). The qualitative and quantitative determinations were carried out by means of a gas chromatograph (Trace GC, Thermo) coupled to a mass spectrometer (Trace DSQ, thermo). GC separations were achieved on an HP-VOC (30 m×0.20 id, 1.12 µm) fused-silica capillary column. A static headspace injection was used. The samples were incubated during 30 minutes at 70°C . The injector temperature was maintained at 35°C and a split of 1/10 was used. The GC temperature program was from 35 C (1 min) to 175°C (0 min) at 5 C°min^{-1}. The total run time was 15 min. The carrier gas was helium (flow rate 1.0 ml min^{-1}). The interface temperature was 255°C. The analysis was operated in SIM mode.

The selected ions are reported in the Table below.

	Rt (min)	*Mass m/e*	*Mass m/e*	*IS component*
		Target	Qualifier	
D6-benzene	8.72	84	56	
benzene	8.81	78	77	D6-benzene
D8-toluene	12.90	98	100	
toluene	13.07	91	92	D8-toluene
D10-ethylbenzene	16.69	98	116	
ethylbenzene	16.90	106	91	D10-ethylbenzene
m+p-xylene	17.21	106	91	D10-ethylbenzene
styrene	18.15	104	103	D10-ethylbenzene
o-xylene	18.21	106	91	D10-ethylbenzene

→ **Identification and quantification**

Positive identification of the compounds in the sample extracts was based on GC retention time match and specific ions.
The content of the target analytes in the sample was quantified relative to the internal standards added. The response factors for different compounds were measured by injecting a standard solution containing the target analytes and having the same concentration of internal standards as that used for spiking of the sample. The most abundant ion was used for quantification.

ANNEX G : DIOXINS (PCDD/F CONGENERS)

The determination of dioxines was outsourced to SGS (Institute for Applied Chromatography (IAC), Polderdijkweg 16, Port 407, Antwerp, 2030, responsible Geert De Smet). This laboratory is accredited for the analysis of dioxins in various matrices.

The methodology that is followed is analogous to that described in CEN / TS 16190.

→ Sample preparation

Tampons and sanitary pads were cut into pieces and the parts "in contact with the skin" were further mixed to fine and homogenous particles. Around 5-10 g were used for intake (corresponding to 2-3 complete tampons or 1 sanitary towel).

→ Sample extraction and clean up

The sample was placed in a Soxhlet thimble and spiked with ^{13}C-labeled internal standards (isotope dilution). After the soxhlet extraction the extract was evaporated and then purified on acid silica (2X), then on a multilayer silica column and then on alumina. The eluate was evaporated and then transferred to an injection vial.

→ GC-HRMS

After adding of a recovery standard, the extract was injected in a high resolution GC-MS (resolution 10,000). The specific exact masses of the resp. dioxin congeners were registered. The quantification was done with the internal standard method (istope dilution). The relative response factors were determined relative to the isotope-labeled compounds in the calibration step. The recoveries of the internal standards were determined with respect to the recovery standard.

ADDENDUM: DETERMINATION OF ISOSORBIDE

A.1 Introduction

Isosorbide could not be detected by the GC-MS methode which was used for the determination phthalates, TCPP and methylparathion, because of insolubility in the nonpolar extraction solvent. Therefore another approach was evaluated, making use of a polar extraction solvent followed by injection of the extract into a polar solvent compatible GC-column. This method allowed to determine isosorbide quantitatively in tampons and sanitary pads.

A.2 Analytical Method

Extraction
Tampons and sanitary pads were cut into pieces and the parts "in contact with the skin" were further mixed to fine and homogenous particles. Around 5 resp. 10 g were used for intake (corresponding to 2-3 complete tampons or 1 sanitary towel) and the samples were extracted with 100 resp. 200 mL of methanol (the sample was completely immersed in the extraction solvent). The extraction was done with ultrasonication for 1 hour, followed by 1 hour shaking. From the supernatant 10 mL was taken and evaporated under nitrogen to obtain a final volume of 1 mL (MeOH/H2O 1/1 v/v).

GC-MS measurement
The quantitative determination was carried out by means of a gas chromatograph (Trace GC, Thermo) coupled to a mass spectrometer (Trace DSQ, thermo). GC separations were achieved on an SOLGEL-WAX (30 m×0.25 id, 0.25 µm) fused-silica capillary column. The injector mode was splitless (1 min). The injector temperature was maintained at 250°C. The GC temperature program was from 65°C (1 min) to 320°C (5 min) at 20°C min^{-1}. The total run time was 15 min. The carrier gas was helium (flow rate 1.0 ml min^{-1}). The interface temperature was 250°C. The analysis was operated in SIM mode. D8-o-cresol was used as internal standard.

The selected ions for detection and quantification are reported in the Table below.

Compound	RT (min)	m1	m2
Isosorbide	11.7	86	69
D8-o-cresol	8.2	115	113

A.2 Results

GC-MS concentrations for isosorbide in tampons and sanitary pads are given in Table 7. From the table it can be seen that isosorbide was not detected in the majority of the samples in concentrations <0.1 mg/kg. Two exceptions are Sample 2 (sanitary pad) and Sample 8 (tampon), for which concentrations of resp. 13 and 7.8 mg/kg were measured. Chromatograms for both samples are shown in Figure 1.

A.2 Conclusion

Isosorbide is the only compound of all selected analytes that was found in concentrations >1 mg/kg. The origin of isosorbide in tampons and sanitary pads is unclear. The compound is synthesised from

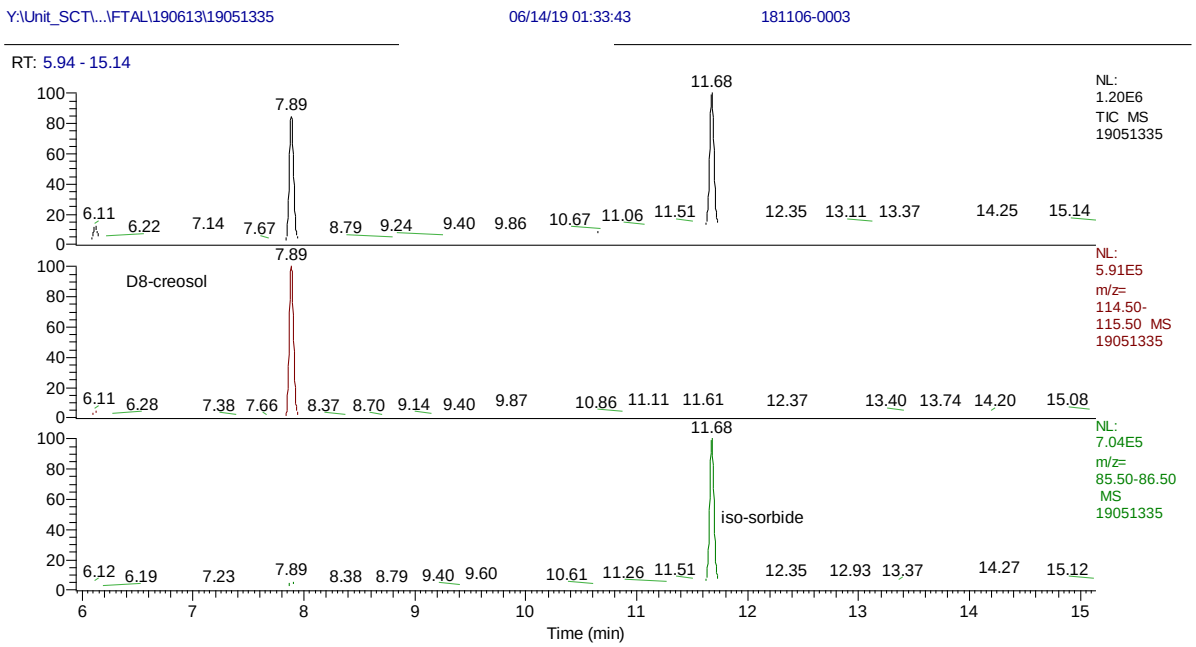
sorbitol and used a.o. as comonomer for polyesters and polycarbonates and as drug precursor. It can also be esterified to so-called green or biobased plasticisers (e.g. isosorbide di(2-ethylhexanoate)), which can replace phthalates.
Toxicological data of isosorbide are scarce; with regard to acute toxicity there is no reason for concern as the LD50 value (oral, rat) is 25 g/kg (see PubChem).

Table 7: Measured isosorbide concentrations in tampons (T) and sanitary pads (S)

VITO code	Sample	Type	mg/kg
181106-0002	1	T	< 0.1
181106-0003	2	S	13
181106-0004	3	T	< 0.1
181106-0005	4	S	< 0.1
181106-0006	5	T	< 0.1
181106-0007	6	S	< 0.1
181106-0008	7	T	< 0.1
181106-0009	8	T	7,8
181106-0010	9	T	< 0.1
181106-0011	10	S	< 0.1
181106-0012	11	S	< 0.1
181106-0013	12	S	< 0.1
181106-0014	13	S	< 0.1
181106-0015	14	S	< 0.1
181106-0016	15	S	< 0.1
181106-0017	16	S	< 0.1
181106-0018	17	T	< 0.1
181106-0019	18	S	< 0.1
181106-0020	19	S	< 0.1
181106-0021	20	T	< 0.1
181212-0001	21	S	< 0.1
181212-0002	22	T	< 0.1
190214-0099	23	T	< 0.1
190225-0078	24	T	< 0.1

Figure 1: GC-MS chromatograms of isosorbide in positive samples

Sample 2 (sanitary pad)



Sample 8 (tampon)