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MONITORING OF THE BELGIAN MARKET WITH REGARD TO ORGANIC RESIDUES IN BABY NAPPIES – Part 2: Target analyses

Jacobs Griet, Van De Weghe Hendrik, Lievens Jo, Van Deun Masha, Bertels Diane, Poelmans Ellen, Vanermen Guido

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VITO NV
Boeretang 200 - 2400 MOL - BELGIE
Tel. + 32 14 33 55 11 - Fax + 32 14 33 55 99
vito@vito.be - www.vito.be
BTW BE-0244.195.916 RPR (Turnhout)
Bank 375-1117354-90 ING
BE34 3751 1173 5490 - BBRUBEBB

DISTRIBUTION LIST

Federal Public Service Health, Food Chain Safety and Environment
VITO

SUMMARY

In this report the results of the quantitative determinations of selected carcinogenic, mutagenic and reprotoxic substances (CMR) in diapers are presented. Baby diapers available on the Belgian market have been collected and the textile part of these diapers has 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; other compounds were detected only slightly above. The sole exception is nonylfenol, which has been detected in some diapers in concentrations above 1 mg/kg. If the presence of this compound in diapers poses a health risk should be further evaluated.

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CHAPTER 1 INTRODUCTION

The object of the present study is to analyse baby nappies present on the Belgian market in order to assess their possible content of residues of organic substances. Several consumer associations have demonstrated, on the basis of analyses, that baby nappies 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 baby nappies on a large basis 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 baby nappies 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 baby nappies in order to determine, on a quantitative basis, their possible content of organic substances present in the textile part.

In part 1 4 baby nappies coming from different suppliers and of different brands present on the Belgian market (2 store brands, 1 bio-brand, 1 big-name brand) were purchased. Inventory of the samples, preparation of the samples, screening/analysis on the presence of organic residues and formal identification of the molecules detected were carried out and reported per sample mentioning the results (see VITO report 2018/SCT/R/1490). 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 CRM's were observed. Only some phthalates, mono-aromatic hydrocarbons and maybe phenolic compounds might draw attention, but concentrations were low (low mg/kg).

In this report the results of the quantitative analysis of selected CRM and EDC substances (part 2), using specific analytical methods, are presented.

CHAPTER 2 WORKPACKAGE 2 – QUANTITATIVE ANALYSIS OF BABY DIAPERS

The articles that were analyzed are baby diapers that differs in terms of structure, trademark and constituent materials. The analysis consists of the pretreatment and extraction of diapers 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 - F.

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	included	add	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	Acenaphhtene	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		192-97-2	B(e)pyrene		x	GC-MS	2.2
16		50-32-8	B(a)pyrene	x		GC-MS	2.2
17		139-39-5	Ind(123cd)pyrene	x		GC-MS	2.2
18		53-70-3	diB(ah)anthracene	x		GC-MS	2.2

#		CAS	Name	included	add	technique	WP
19		191-24-2	B(ghi)perylene	x		GC-MS	2.2
20	Phthalates and pesticides	121-75-5	Malathion	x		GC-MS	2.3
21		2921-88-2	Chlorpyrifos-ethyl	x		GC-MS	2.3
22		959-98-8	alpha-endosulfan	x		GC-MS	2.3
23		33213-65-9	béta-endosulfan	x		GC-MS	2.3
24		1031-07-8	Endosulfan sulphate	x		GC-MS	2.3
25		6923-22-4	Monocrotophos	x		GC-MS/LC-MS-MS (ESI+)	2.3/2.5
26		56-38-2	Methyl-parathion	x		GC-MS	2.3/2.5
27		10265-92-6	Methamidophos	x		GC-MS/LC-MS-MS (ESI+)	2.3
28		84-74-2	Phtalate DBP	x		GC-MS	2.3
29		117-81-7	Phtalate DEHP	x		GC-MS	2.3
30		131-11-3	Phtalate DMP	x		GC-MS	2.3
31		28553-12-0	Phtalate DINP	x		GC-MS	2.3
32	biocides, phenolic compounds and parabens	94-26-8	Butyl paraben	x		LC-MS/MS (ESI-)	2.4
33		97-23-4	Dichlorophen	x		LC-MS/MS (ESI-)	2.4
34		3380-34-5	Triclosan	x		LC-MS/MS (ESI-)	2.4
35		80-09-1	Bisphenol S	x		LC-MS/MS (ESI-)	2.4
36		140-66-9	4-(1,1,3,3-tetramethylbutyl)phenol	x		LC-MS/MS (ESI-)	2.4
37		104-40-5	Nonylphenol		x	LC-MS/MS (ESI-)	2.4
38		104-43-8	Dodecylphenol		x	LC-MS/MS (ESI-)	2.4
39		335-67-1	Perfluorooctaanzuur (PFOA)	x		LC-MS/MS (ESI-)	2.4
40		99-76-3	Methyl-paraben		x	LC-MS/MS (ESI-)	2.4
41		120-47-8	Ethylparaben		x	LC-MS/MS (ESI-)	2.4
42		94-13-3	Propylparaben		x	LC-MS/MS (ESI-)	2.4
43	biocides and caprolactam	105-60-2	6-caprolactam		x	LC-MS/MS (ESI+)	2.5
44		7286-69-3	Sebutylazine		x	LC-MS/MS (ESI+)	2.5
45		5914-41-3	Terbutylazine		x	LC-MS/MS (ESI+)	2.5
46		2634-33-5	1,2-benzisothiazoline-3-one (BIT)		x	LC-MS/MS (ESI+)	2.5
47		2682-20-4	2-methyl-4-isothiazolin-3-one (MIT)		x	LC-MS/MS (ESI+)	2.5
48		26172-55-4	5-chloro-2-methyl-4-isothiazoline-3-one (CIT)		x	LC-MS/MS (ESI+)	2.5
49		26530-20-1	2-octyl-2H-isothizaol-3-one (OIT)		x	LC-MS/MS (ESI+)	2.5
50		116-06-3	Aldicarb	x		LC-MS/MS (ESI+)	2.5
51	mono	100-42-5	Styrene		x	headspace GC-MS	additional
52		98-83-9	alpha-methylstyrene		x	headspace GC-MS	additional

#		CAS	Name	included	add	technique	WP
53		71-43-2	Benzene		x	headspace GC-MS	additional
54		108-88-3	Toluene		x	headspace GC-MS	additional
55		100-41-4	Ethylbenzene		x	headspace GC-MS	additional
56		1330-20-7/ 106-42-3	p+m-xylene		x	headspace GC-MS	additional
57	dioxines (PCDD/F congeners)	51207-31-9	2,3,7,8-TCDF	x		GC-HRMS	SGS
58		1746-01-6	2,3,7,8-TCDD	x		GC-HRMS	SGS
59		57117-41-6	1,2,3,7,8-PeCDF	x		GC-HRMS	SGS
60		57117-31-4	2,3,4,7,8-PeCDF	x		GC-HRMS	SGS
61		40321-76-4	1,2,3,7,8-PeCDD	x		GC-HRMS	SGS
62		70648-26-9	1,2,3,4,7,8-HxCDF	x		GC-HRMS	SGS
63		57117-44-9	1,2,3,6,7,8-HxCDF	x		GC-HRMS	SGS
64		60851-34-5	2,3,4,6,7,8-HxCDF	x		GC-HRMS	SGS
65		72918-21-9	1,2,3,7,8,9-HxCDF	x		GC-HRMS	SGS
66		39227-28-6	1,2,3,4,7,8-HxCDD	x		GC-HRMS	SGS
67		57653-85-7	1,2,3,6,7,8-HxCDD	x		GC-HRMS	SGS
68		19408-74-3	1,2,3,7,8,9-HxCDD	x		GC-HRMS	SGS
69		67562-39-4	1,2,3,4,6,7,8-HpCDF	x		GC-HRMS	SGS
70		55673-89-7	1,2,3,4,7,8,9-HpCDF	x		GC-HRMS	SGS
71		35822-46-9	1,2,3,4,6,7,8-HpCDD	x		GC-HRMS	SGS
72		39001-02-0	OCDF	x		GC-HRMS	SGS
73		3268-87-9	OCDD	x		GC-HRMS	SGS

2.2. SAMPLING

During PART 2 of the project, 20 samples were selected and classified into 3 brands (store, bio and big-name). The baby diapers were bought in the supermarkets located in the neighbourhood of Mol (Turnhout, oud-Turnhout) and are considered representative for the whole Belgian territory. Nevertheless, 2 samples were also collected in Wallonia (Awans and Rocourt). This was done in order to have samples that are representive for the monitoring of the Belgian market (store brands). However, only 13 baby diapers were found directly on the Belgian market; 5 others were collected from webshops (bol.com, nutur.Nl and Blabloom.com). Still, the target of 20 baby diapers was not reached and 2 additional diapers (a big name and store brand) were purchased in Baarle-Nassau (The Netherlands), on the Dutch border. In total 20 baby diapers were purchased; 5 Bio baby diapers, 11 store brand diapers and 4 big-name brands. In Table 2, the selection of the baby diapers representative for the Belgian territory is listed.
Not all diapers were available in size 2; instead of size 2, size 3 (midi) was purchased for Diaper-8 and Diaper-9.

Table 2: Selection of the baby-diapers representative for the Belgian territory.

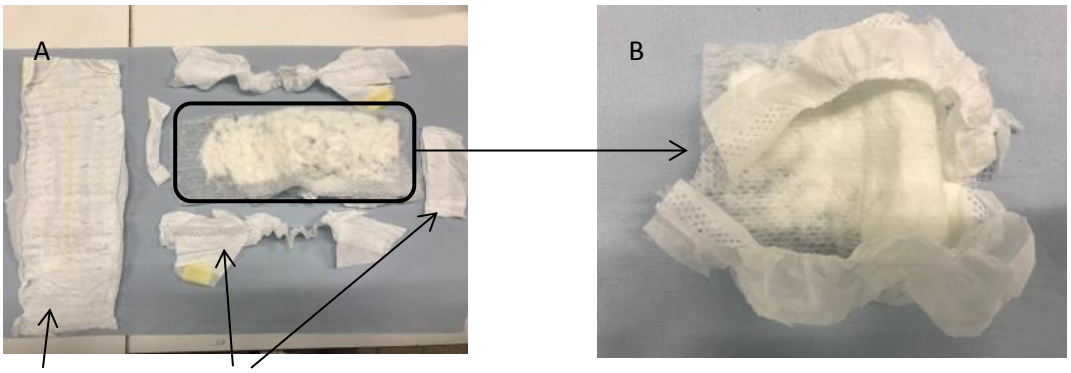
#	VITO code	Sample name	Size	Shop location
1	171221-0099	Diaper-1	2	Mol
2	171221-0100	Diaper-2	2	Turnhout
3	171221-0101	Diaper-3	2	Mol
4	171221-0102	Diaper-4	2	Mol
5	171221-0103	Diaper-5	2	Turnhout
6	171221-0104	Diaper-6	2	Turnhout
7	171221-0105	Diaper-7	2	Oud-Turnhout
8	171221-0106	Diaper-8	3	Oud-Turnhout
9	171221-0107	Diaper-9	3	Oud-Turnhout
10	171221-0108	Diaper-10	2	Turnhout
11	171221-0109	Diaper-11	2	Turnhout
12	171221-0110	Diaper-12	2	Baarle-Nassau
13	171221-0111	Diaper-13	2	Baarle-Nassau
14	171221-0112	Diaper-14	2	Webshop
15	171221-0113	Diaper-15	2	Webshop
16	171221-0114	Diaper-16	2	Webshop
17	171221-0115	Diaper-17	1+2	Webshop
18	171221-0116	Diaper-18	2	Rocourt
19	171221-0117	Diaper-19	2	Awans
20	171221-0118	Diaper-20	2	Webshop

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

The diapers were cut into pieces (Figure 1, A) 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 (Figure 1, B).

Figure 1: Parts of the baby diapers used for analysis



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Sides (NOT USED FOR ANALYSIS)

PARTS USED FOR ANALYSIS

2.4. QUANTITATIVE ANALYSIS

In total 7 methods were used for the target (quantitative) analysis of the baby-diapers (n=20). 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 are expressed in mg/kg, not corresponding to a whole diaper but the part that was used for analysis (mainly fluff).

Table 3: Summary of the different methods used for quantification

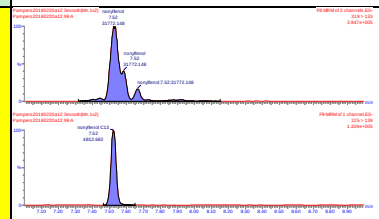
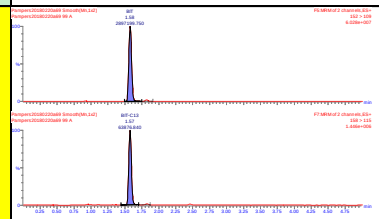
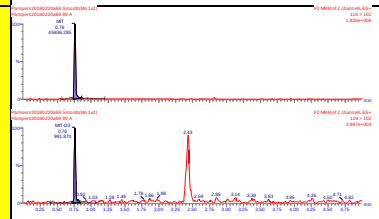
#	Name	Sample pretreatment	Analytical technique	Details Annex
1	Glyphosate	SPE, derivatization	LC-MS/MS (ESI-)	A
2	Polyaromatic hydrocarbons (PAH)	Extraction with aceton/n-hexane (20/80; v/v) and clean-up with combined silica/alumina column	GC-MS	B
3	Phthalates and pesticides	Dichloromethane extraction (sonication)	GC-MS	C
4	biocides, phenolic compounds and 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	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. DIAPER-1 - 171121-0099

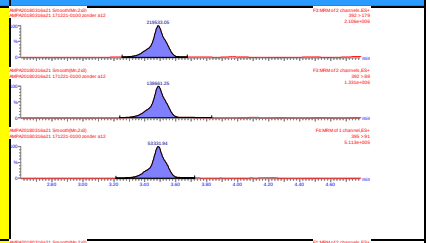
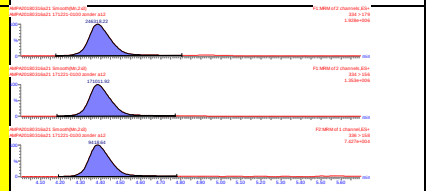
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	20,25	6,04	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	20,25	6,04	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	19,85	3,98	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	19,85	3,98	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	19,85	3,98	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	19,85	3,98	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	19,85	3,98	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	19,85	3,98	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	19,85	3,98	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	19,85	3,98	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	19,85	3,98	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	19,85	3,98	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	19,85	3,98	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	19,85	3,98	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	19,85	3,98	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	19,85	3,98	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	19,85	3,98	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	19,85	3,98	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	19,85	3,98	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	19,85	10,43	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	19,85	10,43	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	19,85	10,43	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	19,85	10,43	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	19,85	10,43	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	19,85	10,43	0,024	32%	<0.024	
26		Methyl-parathion	GC-MS	ANNEX C	19,85	10,43	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	19,85	10,43	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	19,85	10,43	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	19,85	10,43	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	19,85	10,43	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	19,85	10,43	NR	NR	not reported due to interference	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	49%	0,14	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	20,375	9,55	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	20,375	9,55	0,010	24%	<0.010	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	20,375	9,55	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	20,375	9,55	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	20,375	9,55	0,010	53%	1,6	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	20,375	9,55	0,010	23%	0,44	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	20,375	9,55	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	20,375	9,55	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	20,375	9,55	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	20,375	9,55	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	20,375	9,55	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	20,375	9,55	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	20,375	9,55	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	20,375	9,55	0,10	24%	<0.10	
57	dioxines (PCDD/F congeners)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,17	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.050	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	0,076	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	0,060	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.077	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	0,042	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.035	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.038	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.031	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.051	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.039	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.046	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.33	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.33	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.33	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.3	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.3	ng/kg
NR	not reported									

2.5.3. DIAPER-2 - 171121-0100

#		Name	Analytical method	details of the method	weight total diaper (g)	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	23,03	9,96	0,050	35%	0,072	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	23,03	9,96	0,050	58%	0,18	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	21,61	6,13	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	21,61	6,13	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	21,61	6,13	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	21,61	6,13	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	21,61	6,13	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	21,61	6,13	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	21,61	6,13	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	21,61	6,13	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	21,61	6,13	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	21,61	6,13	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	21,61	6,13	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	21,61	6,13	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	21,61	6,13	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	21,61	6,13	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	21,61	6,13	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	21,61	6,13	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	21,61	6,13	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	21,61	8,99	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	21,61	8,99	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	21,61	8,99	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	21,61	8,99	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	21,61	8,99	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	21,61	8,99	0,024	32%	<0.024	
26		Methyl-parathion	GC-MS	ANNEX C	21,61	8,99	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	21,61	8,99	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	21,61	8,99	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	21,61	8,99	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	21,61	8,99	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	21,61	8,99	NR	NR	not reported due to interference	

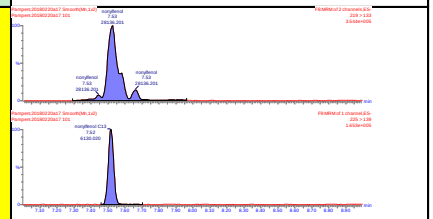
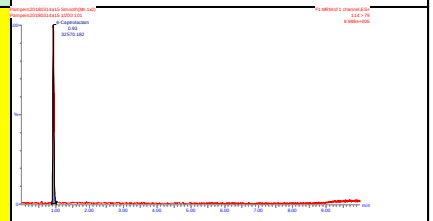
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	49%	<0.010	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	23,52	12,97	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	23,52	12,97	0,010	24%	<0.010	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	23,52	12,97	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	23,52	12,97	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	23,52	12,97	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	23,52	12,97	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	23,52	12,97	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	23,52	12,97	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	23,52	12,97	0,091	29%	<0.091	
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	23,52	12,97	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	23,52	12,97	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	23,52	12,97	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	23,52	12,97	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	23,52	12,97	0,10	24%	<0.10	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,071	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.048	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.052	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	0,056	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.075	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	0,053	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	0,043	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.037	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.031	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.050	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	0,038	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.044	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.32	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.32	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.32	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.3	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.3	ng/kg
	NR	Not Reported								

2.5.4. DIAPER-3 - 171121-0101

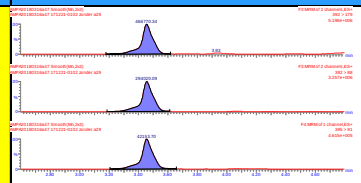
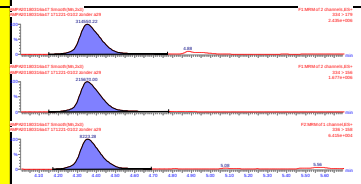
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate and AMPA	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	24,67	12,87	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	24,67	12,87	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	24,41	9,44	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	24,41	9,44	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	24,41	9,44	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	24,41	9,44	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	24,41	9,44	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	24,41	9,44	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	24,41	9,44	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	24,41	9,44	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	24,41	9,44	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	24,41	9,44	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	24,41	9,44	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	24,41	9,44	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	24,41	9,44	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	24,41	9,44	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	24,41	9,44	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	24,41	9,44	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	24,41	9,44	0,060	14%	<0.060	
20	Phthal	Malathion	GC-MS	ANNEX C	24,41	11,23	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	24,41	11,23	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	24,41	11,23	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	24,41	11,23	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	24,41	11,23	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	11,23	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	24,41	11,23	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	24,41	11,23	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	24,41	11,23	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	24,41	11,23	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	24,41	11,23	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	24,41	11,23	NR	NR	not reported due to interference	

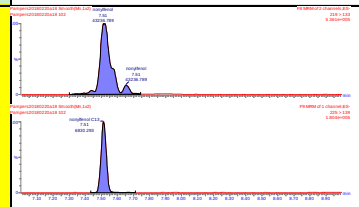
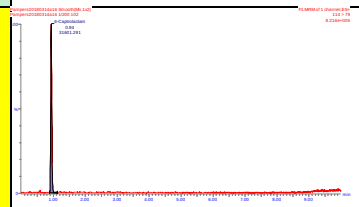
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	49%	0,051	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	25,90	17,99	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	25,90	17,99	0,010	24%	0,46	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	25,90	17,99	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	25,90	17,99	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	25,90	17,99	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	25,90	17,99	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	25,90	17,99	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	25,90	17,99	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	25,90	17,99	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	25,90	17,99	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	25,90	17,99	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	25,90	17,99	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	25,90	17,99	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	25,90	17,99	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,10	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.043	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.047	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.047	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.067	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	0,043	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.031	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.033	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.027	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.045	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.034	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.040	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.29	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.29	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.29	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.1	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.1	ng/kg
	NR	Not Reported								

2.5.5. DIAPER-4 - 171121-0102

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k*=2)	results mg/kg	chromatogram (positive result)
1	glyphosate	Glyphosate	LC-MS/MS (ESI-) after derivatisation	ANNEX A	25,38	15,09	0,050	35%	0,13	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	25,38	15,09	0,050	58%	0,18	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	24,74	11,17	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	24,74	11,17	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	24,74	11,17	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	24,74	11,17	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	24,74	11,17	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	24,74	11,17	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	24,74	11,17	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	24,74	11,17	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	24,74	11,17	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	24,74	11,17	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	24,74	11,17	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	24,74	11,17	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	24,74	11,17	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	24,74	11,17	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	24,74	11,17	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	24,74	11,17	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	24,74	11,17	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	24,74	13,18	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	24,74	13,18	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	24,74	13,18	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	24,74	13,18	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	24,74	13,18	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	13,18	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	24,74	13,18	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	24,74	13,18	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	24,74	13,18	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	24,74	13,18	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	24,74	13,18	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	24,74	13,18	NR	NR	not reported due to interference	

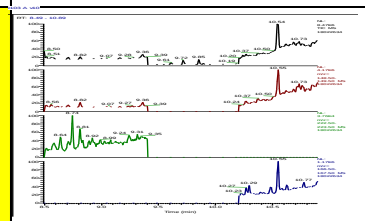
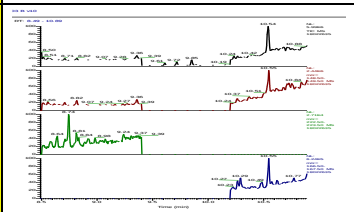
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	49%	0,072	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	25,78	17,50	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	25,78	17,50	0,010	24%	0,46	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	25,78	17,50	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	25,78	17,50	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	25,78	17,50	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	25,78	17,50	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	25,78	17,50	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	25,78	17,50	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	25,78	17,50	0,091	29%	<0.091	

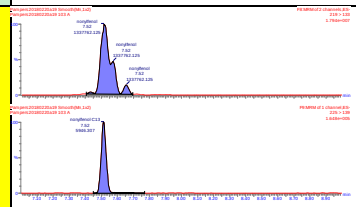
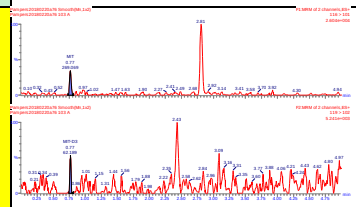
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	25,78	17,50	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	25,78	17,50	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	25,78	17,50	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	25,78	17,50	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	25,78	17,50	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,052	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.047	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.050	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.050	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.072	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	0,042	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.033	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.036	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.029	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.048	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.037	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.043	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
	NR	Not Reported								

2.5.6. DIAPER-5 - 171121-0103

#		Name	Analytical method	details of the method	weight total diaper (g)	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	23,01	6,84	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	23,01	6,84	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	21,96	7,80	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	21,96	7,80	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	21,96	7,80	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	21,96	7,80	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	21,96	7,80	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	21,96	7,80	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	21,96	7,80	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	21,96	7,80	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	21,96	7,80	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	21,96	7,80	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	21,96	7,80	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	21,96	7,80	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	21,96	7,80	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	21,96	7,80	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	21,96	7,80	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	21,96	7,80	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	21,96	7,80	0,060	14%	<0.060	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	21,96	9,70	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	21,96	9,70	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	21,96	9,70	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	21,96	9,70	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	21,96	9,70	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,70	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	21,96	9,70	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	21,96	9,70	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	21,96	9,70	0,025	36%	0,16	
29		Phtalate DEHP	GC-MS	ANNEX C	21,96	9,70	0,20	25%	0,40	
30		Phtalate DMP	GC-MS	ANNEX C	21,96	9,70	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	21,96	9,70	NR	NR	not reported due to interference	

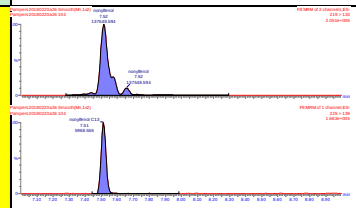
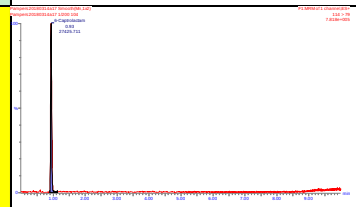
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	49%	2,1	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	28%	<0.01	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	42%	<0.01	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	36%	<0.01	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	21%	<0.01	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	22,95	15,12	0,010	25%	<0.01	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	22,95	15,12	0,010	24%	<0.01	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	22,95	15,12	0,019	46%	<0.01	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	22,95	15,12	0,023	27%	<0.01	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	22,95	15,12	0,010	53%	<0.01	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	22,95	15,12	0,010	23%	0,019	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	22,95	15,12	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	22,95	15,12	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	22,95	15,12	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	22,95	15,12	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	22,95	15,12	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	22,95	15,12	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	22,95	15,12	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	22,95	15,12	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	<0.15	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.16	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.17	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.17	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.25	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.13	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.11	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.12	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.10	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.16	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.13	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.15	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<1.1	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<1.1	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<1.1	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<4.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<4.2	ng/kg
	NR	Not Reported								

2.5.7. DIAPER-6- 171121-0104

#		Name	Analytical method	details of the method	weight total diaper (g)	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	22,24	11,06	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	22,24	11,06	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	21,97	8,17	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	21,97	8,17	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	21,97	8,17	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	21,97	8,17	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	21,97	8,17	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	21,97	8,17	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	21,97	8,17	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	21,97	8,17	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	21,97	8,17	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	21,97	8,17	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	21,97	8,17	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	21,97	8,17	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	21,97	8,17	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	21,97	8,17	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	21,97	8,17	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	21,97	8,17	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	21,97	8,17	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	21,97	8,17	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	21,97	8,17	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	21,97	8,17	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	21,97	8,17	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	21,97	8,17	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	21,97	8,17	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	21,97	8,17	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	21,97	8,17	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	21,97	8,17	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	21,97	8,17	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	21,97	8,17	NR	NR	not reported due to interference	

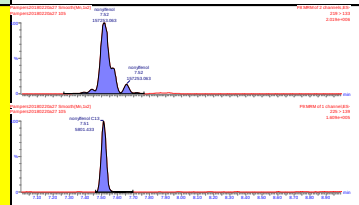
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	49%	0,32	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	22,37	14,31	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	22,37	14,31	0,010	24%	0,48	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	22,37	14,31	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	22,37	14,31	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	22,37	14,31	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	22,37	14,31	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	22,37	14,31	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	22,37	14,31	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	22,37	14,31	0,091	29%	<0.091	

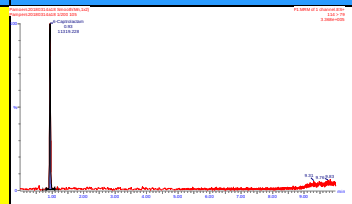
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	22,37	14,31	0,10	30%	<0.010	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	22,37	14,31	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	22,37	14,31	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	22,37	14,31	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	22,37	14,31	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,051	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.049	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.52	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.052	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.076	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.038	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.035	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.037	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.031	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.050	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.038	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.045	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.32	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.32	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.32	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.3	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.3	ng/kg
	NR	Not Reported								

2.5.8. DIAPER-7 - 171121-0105

#		Name	Analytical method	details of the method	weight total diaper (g)	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	25,61	13,93	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	25,61	13,93	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	25,47	11,41	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	25,47	11,41	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	25,47	11,41	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	25,47	11,41	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	25,47	11,41	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	25,47	11,41	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	25,47	11,41	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	25,47	11,41	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	25,47	11,41	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	25,47	11,41	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	25,47	11,41	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	25,47	11,41	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	25,47	11,41	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	25,47	11,41	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	25,47	11,41	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	25,47	11,41	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	25,47	11,41	0,060	14%	<0.060	

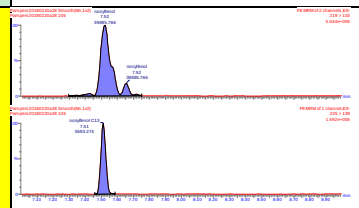
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	25,47	11,41	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	25,47	11,41	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	25,47	11,41	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	25,47	11,41	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	25,47	11,41	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	25,47	11,41	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	25,47	11,41	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	25,47	11,41	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	25,47	11,41	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	25,47	11,41	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	25,47	11,41	NR	NR	not reported due to interference	
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	49%	0,32	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	25,02	17,15	0,010	25%	<0.010	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	25,02	17,15	0,010	24%	0,15	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	25,02	17,15	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	25,02	17,15	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	25,02	17,15	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	25,02	17,15	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	25,02	17,15	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	25,02	17,15	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	25,02	17,15	0,091	29%	<0.091	
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	25,02	17,15	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	25,02	17,15	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	25,02	17,15	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	25,02	17,15	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	25,02	17,15	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	<0.044	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.047	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.051	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.051	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.073	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.037	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.033	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.036	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.030	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.048	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.037	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.043	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
	NR	Not Reported								

2.5.9. DIAPER-8 - 171121-0106

#		Name	Analytical method	details of the method	weight total diaper (g)	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	29,54	11,71	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	29,54	11,71	0,050	58%	<0.051	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	28,92	7,48	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	28,92	7,48	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	28,92	7,48	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	28,92	7,48	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	28,92	7,48	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	28,92	7,48	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	28,92	7,48	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	28,92	7,48	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	28,92	7,48	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	28,92	7,48	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	28,92	7,48	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	28,92	7,48	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	28,92	7,48	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	28,92	7,48	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	28,92	7,48	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	28,92	7,48	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	28,92	7,48	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	28,92	7,48	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	28,92	7,48	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	28,92	7,48	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	28,92	7,48	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	28,92	7,48	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	28,92	7,48	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	28,92	7,48	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	28,92	7,48	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	28,92	7,48	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	28,92	7,48	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	28,92	7,48	NR	NR	not reported due to interference	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	49%	0,087	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	29,51	16,40	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	29,51	16,40	0,010	24%	<0.010	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	29,51	16,40	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	29,51	16,40	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	29,51	16,40	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	29,51	16,40	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	29,51	16,40	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	29,51	16,40	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	29,51	16,40	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	29,51	16,40	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	29,51	16,40	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	29,51	16,40	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	29,51	16,40	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	29,51	16,40	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	<0.045	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.047	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.051	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.051	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.073	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.037	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.034	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.036	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.030	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.048	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.037	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.043	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
	NR	Not Reported								

2.5.10. DIAPER-9 - 171121-0107

#		Name	Analytical method	details of the method	weight total diaper (g)	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	27,90	12,45	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	27,90	12,45	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	27,80	8,83	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	27,80	8,83	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	27,80	8,83	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	27,80	8,83	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	27,80	8,83	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	27,80	8,83	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	27,80	8,83	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	27,80	8,83	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	27,80	8,83	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	27,80	8,83	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	27,80	8,83	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	27,80	8,83	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	27,80	8,83	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	27,80	8,83	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	27,80	8,83	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	27,80	8,83	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	27,80	8,83	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	27,80	8,83	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	27,80	8,83	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	27,80	8,83	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	27,80	8,83	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	27,80	8,83	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	27,80	8,83	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	27,80	8,83	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	27,80	8,83	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	27,80	8,83	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	27,80	8,83	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	27,80	8,83	NR	NR	not reported due to interference	

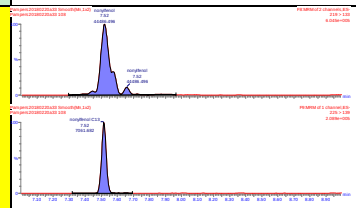
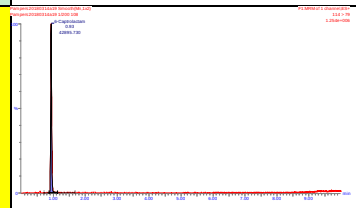
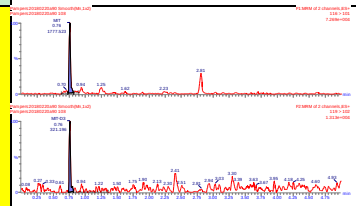
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	49%	<0.010	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	27,99	15,48	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	27,99	15,48	0,010	24%	<0.010	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	27,99	15,48	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	27,99	15,48	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	27,99	15,48	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	27,99	15,48	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	27,99	15,48	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	27,99	15,48	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	27,99	15,48	0,091	29%	<0.091	
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	27,99	15,48	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	27,99	15,48	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	27,99	15,48	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	27,99	15,48	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F			0,10	24%	<0.10	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	<0.043	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.045	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.049	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.049	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.070	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.036	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.032	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.035	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.029	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.047	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.036	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.042	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.3	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.3	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.3	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
	NR	Not Reported								

2.5.11. DIAPER-10 - 171121-0108

#		Name	Analytical method	details of the method	weight total diaper (g)	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	25,59	13,43	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	25,59	13,43	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	26,43	11,03	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	26,43	11,03	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	26,43	11,03	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	26,43	11,03	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	26,43	11,03	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	26,43	11,03	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	26,43	11,03	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	26,43	11,03	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	26,43	11,03	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	26,43	11,03	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	26,43	11,03	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	26,43	11,03	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	26,43	11,03	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	26,43	11,03	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	26,43	11,03	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	26,43	11,03	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	26,43	11,03	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	26,43	11,03	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	26,43	11,03	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	26,43	11,03	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	26,43	11,03	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	26,43	11,03	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	26,43	11,03	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	26,43	11,03	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	26,43	11,03	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	26,43	11,03	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	26,43	11,03	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	26,43	11,03	NR	NR	not reported due to interference	

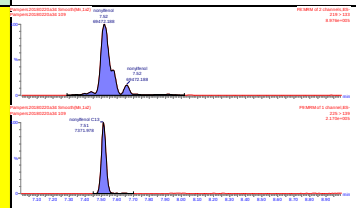
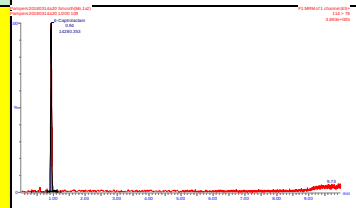
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	49%	0,065	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	25,65	19,17	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	25,65	19,17	0,010	24%	0,59	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	25,65	19,17	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	25,65	19,17	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	25,65	19,17	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	25,65	19,17	0,010	23%	0,028	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	25,65	19,17	0,010	23%	<0.01	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	25,65	19,17	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	25,65	19,17	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	25,65	19,17	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	25,65	19,17	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	25,65	19,17	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	25,65	19,17	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	25,65	19,17	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	<0.044	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.047	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.050	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.050	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.072	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.037	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.033	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.036	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.029	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.048	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.037	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.043	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
	NR	Not Reported								

2.5.12. DIAPER-11 - 171121-0109

#		Name	Analytical method	details of the method	weight total diaper (g)	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	25,96	12,73	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	25,96	12,73	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	26,13	7,77	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	26,13	7,77	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	26,13	7,77	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	26,13	7,77	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	26,13	7,77	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	26,13	7,77	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	26,13	7,77	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	26,13	7,77	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	26,13	7,77	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	26,13	7,77	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	26,13	7,77	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	26,13	7,77	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	26,13	7,77	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	26,13	7,77	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	26,13	7,77	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	26,13	7,77	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	26,13	7,77	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	26,13	7,77	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	26,13	7,77	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	26,13	7,77	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	26,13	7,77	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	26,13	7,77	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	26,13	7,77	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	26,13	7,77	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	26,13	7,77	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	26,13	7,77	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	26,13	7,77	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	26,13	7,77	NR	NR	not reported due to interference	

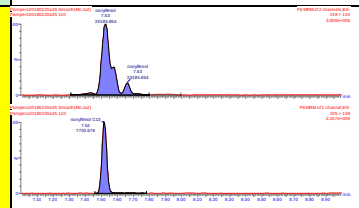
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	49%	0,11	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	26,95	17,47	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	26,95	17,47	0,010	24%	0,20	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	26,95	17,47	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	26,95	17,47	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	26,95	17,47	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	26,95	17,47	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	26,95	17,47	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	26,95	17,47	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	26,95	17,47	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	26,95	17,47	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	26,95	17,47	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	26,95	17,47	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	26,95	17,47	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	26,95	17,47	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,057	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.043	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.046	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.046	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.067	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.034	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.031	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.033	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.027	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.044	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.034	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.040	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.28	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.28	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.28	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.1	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.1	ng/kg
	NR	Not Reported								

2.5.13. DIAPER-12 - 171121-0110

#		Name	Analytical method	details of the method	weight total diaper (g)	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	23,66	8,49	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	23,66	8,49	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	23,92	4,63	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	23,92	4,63	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	23,92	4,63	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	23,92	4,63	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	23,92	4,63	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	23,92	4,63	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	23,92	4,63	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	23,92	4,63	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	23,92	4,63	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	23,92	4,63	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	23,92	4,63	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	23,92	4,63	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	23,92	4,63	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	23,92	4,63	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	23,92	4,63	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	23,92	4,63	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	23,92	4,63	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	23,92	4,63	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	23,92	4,63	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	23,92	4,63	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	23,92	4,63	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	23,92	4,63	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	23,92	4,63	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	23,92	4,63	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	23,92	4,63	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	23,92	4,63	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	23,92	4,63	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	23,92	4,63	NR	NR	not reported due to interference	

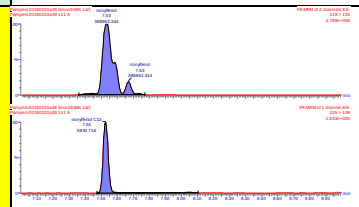
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	49%	0,046	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	24,17	12,95	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	24,17	12,95	0,010	24%	<0.010	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	24,17	12,95	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	24,17	12,95	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	24,17	12,95	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	24,17	12,95	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	24,17	12,95	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	24,17	12,95	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	24,17	12,95	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	24,17	12,95	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	24,17	12,95	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	24,17	12,95	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	24,17	12,95	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	24,17	12,95	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,078	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.071	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.076	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.076	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.11	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.046	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.050	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.054	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.045	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.072	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.056	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.065	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.46	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.46	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.46	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.9	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.9	ng/kg
	NR	Not Reported								

2.5.14. DIAPER-13 – 171121-0111

#		Name	Analytical method	details of the method	weight total diaper (g)	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	24,89	9,04	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	24,89	9,04	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
4		Acenaphthylene	GC-MS	ANNEX B	24,55	4,75	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	24,55	4,75	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	24,55	4,75	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	24,55	4,75	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	24,55	4,75	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	24,55	4,75	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	24,55	4,75	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	24,55	4,75	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	24,55	4,75	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	24,55	4,75	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	24,55	4,75	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	24,55	4,75	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	24,55	4,75	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	24,55	4,75	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	24,55	4,75	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	24,55	4,75	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	24,55	4,75	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	24,55	4,75	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	24,55	4,75	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	24,55	4,75	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	24,55	4,75	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	24,55	4,75	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	24,55	4,75	NR	NR	<0.010	
28		Phtalate DBP	GC-MS	ANNEX C	24,55	4,75	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	24,55	4,75	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	24,55	4,75	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	24,55	4,75	NR	NR	not reported due to interference	

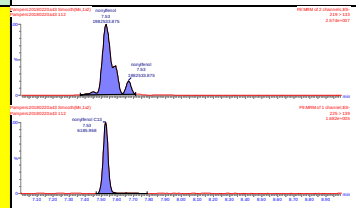
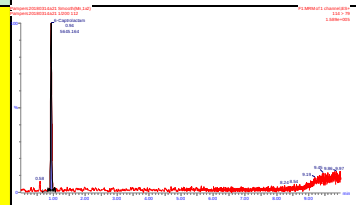
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	49%	1,1	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	24,32	11,69	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	24,32	11,69	0,010	24%	<0.010	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	24,32	11,69	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	24,32	11,69	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	24,32	11,69	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	24,32	11,69	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	24,32	11,69	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	24,32	11,69	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	24,32	11,69	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	24,32	11,69	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	24,32	11,69	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	24,32	11,69	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	24,32	11,69	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	24,32	11,69	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	<0.049	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.051	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.055	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.055	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.080	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.041	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.037	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.039	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.032	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.053	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.041	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.047	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.34	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.34	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.34	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.4	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.4	ng/kg
	NR	Not Reported								

2.5.15. DIAPER-14 - 171121-0112

#		Name	Analytical method	details of the method	weight total diaper (g)	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	23,35	4,40	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	23,35	4,40	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	23,26	4,12	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	23,26	4,12	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	23,26	4,12	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	23,26	4,12	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	23,26	4,12	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	23,26	4,12	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	23,26	4,12	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	23,26	4,12	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	23,26	4,12	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	23,26	4,12	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	23,26	4,12	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	23,26	4,12	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	23,26	4,12	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	23,26	4,12	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	23,26	4,12	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	23,26	4,12	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	23,26	4,12	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	23,26	4,12	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	23,26	4,12	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	23,26	4,12	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	23,26	4,12	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	23,26	4,12	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	23,26	4,12	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	23,26	4,12	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	23,26	4,12	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	23,26	4,12	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	23,26	4,12	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	23,26	4,12	NR	NR	not reported due to interference	

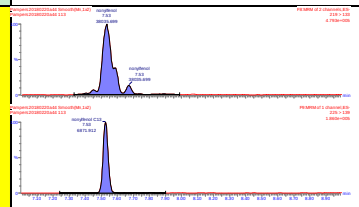
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	49%	3,4	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	23,66	15,69	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	23,66	15,69	0,010	24%	0,075	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	23,66	15,69	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	23,66	15,69	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	23,66	15,69	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	23,66	15,69	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	23,66	15,69	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	23,66	15,69	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	23,66	15,69	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	23,66	15,69	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	23,66	15,69	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	23,66	15,69	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	23,66	15,69	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	23,66	15,69	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	<0.080	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.085	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.091	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.091	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.13	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.067	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	0,18	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	0,19	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	0,065	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.087	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.067	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	0,085	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	0,91	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.56	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.56	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<2.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<2.2	ng/kg
	NR	Not Reported								

2.5.16. DIAPER-15 - 171121-0113

#		Name	Analytical method	details of the method	weight total diaper (g)	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	25,66	13,83	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	25,66	13,83	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	25,22	7,52	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	25,22	7,52	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	25,22	7,52	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	25,22	7,52	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	25,22	7,52	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	25,22	7,52	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	25,22	7,52	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	25,22	7,52	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	25,22	7,52	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	25,22	7,52	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	25,22	7,52	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	25,22	7,52	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	25,22	7,52	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	25,22	7,52	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	25,22	7,52	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	25,22	7,52	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	25,22	7,52	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	25,22	7,52	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	25,22	7,52	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	25,22	7,52	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	25,22	7,52	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	25,22	7,52	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	25,22	7,52	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	25,22	7,52	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	25,22	7,52	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	25,22	7,52	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	25,22	7,52	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	25,22	7,52	NR	NR	not reported due to interference	

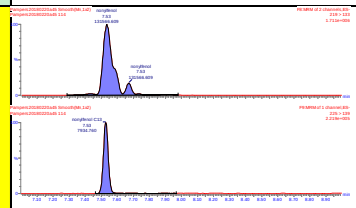
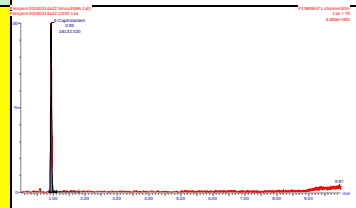
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	49%	0,063	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	26,32	17,46	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	26,32	17,46	0,010	24%	<0.010	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	26,32	17,46	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	26,32	17,46	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	26,32	17,46	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	26,32	17,46	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	26,32	17,46	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	26,32	17,46	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	26,32	17,46	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	26,32	17,46	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	26,32	17,46	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	26,32	17,46	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	26,32	17,46	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	26,32	17,46	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,054	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.047	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.051	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.051	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.073	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.037	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.033	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.036	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.030	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.048	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.037	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.043	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
	NR	Not Reported								

2.5.17. DIAPER-16 - 171121-0114

#		Name	Analytical method	details of the method	weight total diaper (g)	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	23,17	8,63	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	23,17	8,63	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	23,86	4,10	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	23,86	4,10	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	23,86	4,10	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	23,86	4,10	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	23,86	4,10	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	23,86	4,10	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	23,86	4,10	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	23,86	4,10	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	23,86	4,10	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	23,86	4,10	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	23,86	4,10	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	23,86	4,10	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	23,86	4,10	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	23,86	4,10	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	23,86	4,10	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	23,86	4,10	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	23,86	4,10	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	23,86	4,10	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	23,86	4,10	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	23,86	4,10	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	23,86	4,10	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	23,86	4,10	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	23,86	4,10	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	23,86	4,10	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	23,86	4,10	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	23,86	4,10	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	23,86	4,10	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	23,86	4,10	NR	NR	not reported due to interference	

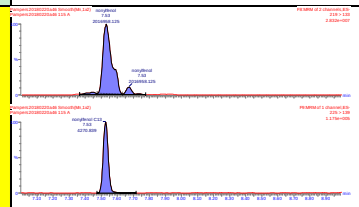
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	49%	0,27	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	23,40	12,57	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	23,40	12,57	0,010	24%	0,35	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	23,40	12,57	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	23,40	12,57	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	23,40	12,57	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	23,40	12,57	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	23,40	12,57	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	23,40	12,57	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	23,40	12,57	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	23,40	12,57	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	23,40	12,57	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	23,40	12,57	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	23,40	12,57	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	23,40	12,57	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	<0.050	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.053	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.057	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.057	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.082	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.042	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.037	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.040	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.033	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.054	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.042	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.048	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.35	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.35	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.35	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.4	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.4	ng/kg
	NR	Not Reported								

2.5.18. DIAPER-17 - 171121-0115

#		Name	Analytical method	details of the method	weight total diaper (g)	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	26,70	13,83	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	26,70	13,83	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	26,59	8,39	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	26,59	8,39	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	26,59	8,39	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	26,59	8,39	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	26,59	8,39	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	26,59	8,39	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	26,59	8,39	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	26,59	8,39	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	26,59	8,39	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	26,59	8,39	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	26,59	8,39	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	26,59	8,39	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	26,59	8,39	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	26,59	8,39	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	26,59	8,39	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	26,59	8,39	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	26,59	8,39	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	26,59	8,39	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	26,59	8,39	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	26,59	8,39	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	26,59	8,39	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	26,59	8,39	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	26,59	8,39	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	26,59	8,39	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	26,59	8,39	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	26,59	8,39	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	26,59	8,39	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	26,59	8,39	NR	NR	not reported due to interference	

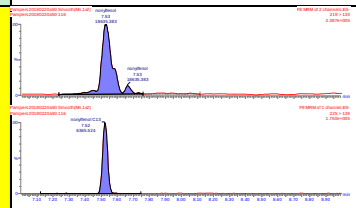
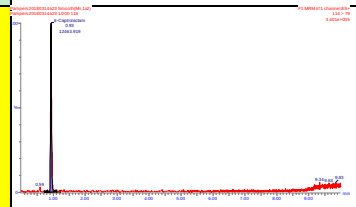
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	40%	<0.010	High MU, external calibration -> matrix effects
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,022	19%	<0.010	High MU, external calibration -> matrix effects
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	49%	4,4	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	26,86	17,60	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	26,86	17,60	0,010	24%	<0.010	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	26,86	17,60	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	26,86	17,60	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	26,86	17,60	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	26,86	17,60	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	26,86	17,60	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	26,86	17,60	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	26,86	17,60	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	26,86	17,60	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	26,86	17,60	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	26,86	17,60	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	26,86	17,60	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	26,86	17,60	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,068	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.046	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.050	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.050	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.072	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.036	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.033	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.035	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.029	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.047	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.036	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.042	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.3	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.3	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.3	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
	NR	Not Reported								

2.5.19. DIAPER-18 - 171121-0116

#		Name	Analytical method	details of the method	weight total diaper (g)	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	25,23	13,41	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	25,23	13,41	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	24,05	6,34	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	24,05	6,34	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	24,05	6,34	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	24,05	6,34	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	24,05	6,34	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	24,05	6,34	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	24,05	6,34	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	24,05	6,34	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	24,05	6,34	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	24,05	6,34	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	24,05	6,34	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	24,05	6,34	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	24,05	6,34	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	24,05	6,34	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	24,05	6,34	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	24,05	6,34	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	24,05	6,34	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	24,05	6,34	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	24,05	6,34	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	24,05	6,34	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	24,05	6,34	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	24,05	6,34	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	24,05	6,34	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	24,05	6,34	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	24,05	6,34	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	24,05	6,34	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	24,05	6,34	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	24,05	6,34	NR	NR	not reported due to interference	

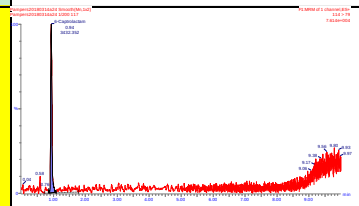
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	49%	0,038	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	23,87	15,15	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	23,87	15,15	0,010	24%	0,19	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	23,87	15,15	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	23,87	15,15	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	23,87	15,15	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	23,87	15,15	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	23,87	15,15	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	23,87	15,15	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	23,87	15,15	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	23,87	15,15	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	23,87	15,15	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	23,87	15,15	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	23,87	15,15	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	23,87	15,15	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,071	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.046	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.050	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.050	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.072	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.037	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.033	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.035	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.029	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.048	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.037	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.043	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
	NR	Not Reported								

2.5.20. DIAPER-19 - 171121-0117

#		Name	Analytical method	details of the method	weight total diaper (g)	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	23,18	12,00	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	23,18	12,00	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	22,80	6,11	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	22,80	6,11	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	22,80	6,11	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	22,80	6,11	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	22,80	6,11	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	22,80	6,11	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	22,80	6,11	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	22,80	6,11	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	22,80	6,11	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	22,80	6,11	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	22,80	6,11	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	22,80	6,11	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	22,80	6,11	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	22,80	6,11	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	22,80	6,11	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	22,80	6,11	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	22,80	6,11	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	22,80	6,11	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	22,80	6,11	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	22,80	6,11	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	22,80	6,11	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	22,80	6,11	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	22,80	6,11	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	22,80	6,11	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	22,80	6,11	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	22,80	6,11	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	22,80	6,11	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	22,80	6,11	NR	NR	not reported due to interference	

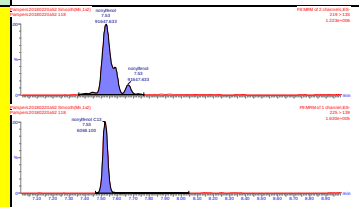
#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	49%	<0.010	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	25,69	17,58	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	25,69	17,58	0,010	24%	0,029	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	25,69	17,58	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	25,69	17,58	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	25,69	17,58	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	25,69	17,58	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	25,69	17,58	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	25,69	17,58	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	25,69	17,58	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	25,69	17,58	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	25,69	17,58	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	25,69	17,58	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	25,69	17,58	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	25,69	17,58	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	0,049	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.047	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.050	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.050	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.073	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.037	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.033	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.036	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.030	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.048	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.037	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.043	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.31	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.2	ng/kg
	NR	Not Reported								

2.5.21. DIAPER-20 - 171121-0118

#		Name	Analytical method	details of the method	weight total diaper (g)	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	27,46	14,18	0,050	35%	<0.050	
2		AMPA	LC-MS/MS (ESI-) after derivatisation	ANNEX A	27,46	14,18	0,050	58%	<0.050	

#		Name	Analytical method	details of the method	weight total diaper (g)	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	27,53	6,89	0,060	30%	<0.060	
4		Acenaphthylene	GC-MS	ANNEX B	27,53	6,89	0,060	22%	<0.060	
5		acenaphthene	GC-MS	ANNEX B	27,53	6,89	0,060	19%	<0.060	
6		fluorene	GC-MS	ANNEX B	27,53	6,89	0,060	21%	<0.060	
7		Phenanthrene	GC-MS	ANNEX B	27,53	6,89	0,060	23%	<0.060	
8		anthracene	GC-MS	ANNEX B	27,53	6,89	0,060	39%	<0.060	
9		fluoranthene	GC-MS	ANNEX B	27,53	6,89	0,060	35%	<0.060	
10		pyrene	GC-MS	ANNEX B	27,53	6,89	0,060	42%	<0.060	
11		B(a)anthracene	GC-MS	ANNEX B	27,53	6,89	0,060	36%	<0.060	
12		chrysene	GC-MS	ANNEX B	27,53	6,89	0,060	23%	<0.060	
13		B(b)fluoranthene	GC-MS	ANNEX B	27,53	6,89	0,060	42%	<0.060	
14		B(k)fluoranthene	GC-MS	ANNEX B	27,53	6,89	0,060	25%	<0.060	
15		B(e)pyrene	GC-MS	ANNEX B	27,53	6,89	0,060	39%	<0.060	
16		B(a)pyrene	GC-MS	ANNEX B	27,53	6,89	0,060	35%	<0.060	
17		ind(123cd)pyrene	GC-MS	ANNEX B	27,53	6,89	0,060	29%	<0.060	
18		diB(ah)anthracene	GC-MS	ANNEX B	27,53	6,89	0,060	30%	<0.060	
19		B(ghi)perylene	GC-MS	ANNEX B	27,53	6,89	0,060	14%	<0.060	
20	Phthalates and pesticides	Malathion	GC-MS	ANNEX C	27,53	6,89	0,010	26%	<0.010	
21		Chlorpyrifos-ethyl	GC-MS	ANNEX C	27,53	6,89	0,010	55%	<0.010	
22		alpha-endosulfan	GC-MS	ANNEX C	27,53	6,89	0,010	52%	<0.010	
23		béta-endosulfan	GC-MS	ANNEX C	27,53	6,89	0,010	54%	<0.010	
24		Endosulfan sulphate	GC-MS	ANNEX C	27,53	6,89	0,010	33%	<0.010	
25		Monocrotophos	GC-MS	ANNEX C	24,41	9,44	1,0	32%	<1.0	
26		Methyl-parathion	GC-MS	ANNEX C	27,53	6,89	0,010	43%	<0.010	
27		Methamidophos	GC-MS	ANNEX C	27,53	6,89	NR	NR	NR	
28		Phtalate DBP	GC-MS	ANNEX C	27,53	6,89	0,025	36%	<0.025	
29		Phtalate DEHP	GC-MS	ANNEX C	27,53	6,89	0,20	25%	<0.20	
30		Phtalate DMP	GC-MS	ANNEX C	27,53	6,89	0,010	59%	<0.010	
31		Phtalate DINP	GC-MS	ANNEX C	27,53	6,89	NR	NR	not reported due to interference	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
32	biocides, phenolic compounds and parabens and PFOA	Butylparaben	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	37%	<0.010	
33		Dichlorophen	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	41%	<0.010	
34		Triclosan	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	40%	<0.010	
35		Bisphenol S	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,022	19%	<0.022	
36		4-(1,1,3,3-tetramethylbutyl)phenol	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	41%	<0.010	
37		Nonylphenol	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	49%	0,19	
38		Dodecylphenol	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	28%	<0.010	
39		Perfluorooctaanzuur (PFOA)	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	42%	<0.010	
40		Methyl-paraben	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	36%	<0.010	
41		Ethylparaben	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	21%	<0.010	
42		Propylparaben	LC-MS/MS (ESI-)	ANNEX D	26,85	15,57	0,010	25%	<0.010	
43	biocides and caprolactam	6-caprolactam	LC-MS/MS (ESI+)	ANNEX E	26,85	15,57	0,010	24%	<0.010	
44		sebutylazine	LC-MS/MS (ESI+)	ANNEX E	26,85	15,57	0,019	46%	<0.019	
45		terbutylazine	LC-MS/MS (ESI+)	ANNEX E	26,85	15,57	0,023	27%	<0.023	
46		1,2-benzisothiazoline-3-one (BIT)	LC-MS/MS (ESI+)	ANNEX E	26,85	15,57	0,010	53%	<0.010	
47		2-methyl-4-isothiazolin-3-one (MIT)	LC-MS/MS (ESI+)	ANNEX E	26,85	15,57	0,010	23%	<0.010	
48		5-chloro-2-methyl-4-isothiazoline-3-one (CIT)	LC-MS/MS (ESI+)	ANNEX E	26,85	15,57	0,010	23%	<0.010	
49		2-octyl-2H-isothizaol-3-one (OIT)	LC-MS/MS (ESI+)	ANNEX E	26,85	15,57	0,029	59%	<0.029	
50		Aldicarb	LC-MS/MS (ESI+)	ANNEX E	26,85	15,57	0,091	29%	<0.091	

#		Name	Analytical method	details of the method	weight total diaper (g)	intake used (part) for analysis (g)	LOQ mg/kg	measurement uncertainty U(*k=2*)	results mg/kg	chromatogram (positive result)
51	mono aromatic hydrocarbons	styrene	headspace GC-MS	ANNEX F	26,85	15,57	0,10	30%	<0.10	
52		alpha-methylstyrene	headspace GC-MS	ANNEX F	26,85	15,57	0,10	30%	<0.10	
53		Benzene	headspace GC-MS	ANNEX F	26,85	15,57	0,10	35%	<0.10	
54		Toluene	headspace GC-MS	ANNEX F	25,69	17,58	NR	NR	not reported due to interference	
55		ethylbenzene	headspace GC-MS	ANNEX F	26,85	15,57	0,10	20%	<0.10	
56		m+p-xylene	headspace GC-MS	ANNEX F	26,85	15,57	0,10	24%	<0.10	
57	dioxines (PCDD/F congeneren)	2,3,7,8-TCDF	GC-HRMS	ANNEX G	-	-	0,0047	20%	<0.041	ng/kg
58		2,3,7,8-TCDD	GC-HRMS	ANNEX G	-	-	0,05	20%	<0.044	ng/kg
59		1,2,3,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,0016	20%	<0.047	ng/kg
60		2,3,4,7,8-PeCDF	GC-HRMS	ANNEX G	-	-	0,016	20%	<0.047	ng/kg
61		1,2,3,7,8-PeCDD	GC-HRMS	ANNEX G	-	-	0,077	20%	<0.068	ng/kg
62		1,2,3,4,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,0039	20%	<0.034	ng/kg
63		1,2,3,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,035	20%	<0.031	ng/kg
64		2,3,4,6,7,8-HxCDF	GC-HRMS	ANNEX G	-	-	0,038	20%	<0.033	ng/kg
65		1,2,3,7,8,9-HxCDF	GC-HRMS	ANNEX G	-	-	0,031	20%	<0.028	ng/kg
66		1,2,3,4,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,051	20%	<0.045	ng/kg
67		1,2,3,6,7,8-HxCDD	GC-HRMS	ANNEX G	-	-	0,039	20%	<0.034	ng/kg
68		1,2,3,7,8,9-HxCDD	GC-HRMS	ANNEX G	-	-	0,046	20%	<0.040	ng/kg
69		1,2,3,4,6,7,8-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.29	ng/kg
70		1,2,3,4,7,8,9-HpCDF	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.29	ng/kg
71		1,2,3,4,6,7,8-HpCDD	GC-HRMS	ANNEX G	-	-	0,33	20%	<0.29	ng/kg
72		OCDF	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.1	ng/kg
73		OCDD	GC-HRMS	ANNEX G	-	-	1,3	20%	<1.1	ng/kg
	NR	Not Reported								

2.6. SUMMARY OF THE RESULTS

An overview of the detected target analytes (above LOQ) in the diapers is given in Table 4. The results are also graphically presented in Figure 2. Only the following compounds have been detected:

- Nonylphenol
- BIT, MIT
- PCDD/F
- Glyphosate, AMPA
- Caprolactam
- Phthalates (DBP, DEHP)

The concentrations are low, not exceeding 1 mg/kg, with the exception of nonylphenol for which somewhat higher values are observed in some diapers (up to 4 mg/kg), and BIT in one diaper (1.6 mg/kg). Nonylphenol is the most frequently detected compound. Also caprolactam has been detected in several diapers.

Although PCDD/F congeners have been detected above the reporting limit in some diapers the significance is negligible. In Table 6 total PCDD/F TEQ (toxicity equivalent) values have been calculated for each diaper 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). From Table 6 it can be concluded that the total TEQ value is not or only negligibly higher than the TEQ LOQ (sum of all congener reporting limits). Remark that for 2 diapers higher total TEQ values are reported, namely Diaper-5 and Diaper-14, but this is due to interferences and hence higher reporting limits.

Table 4: Overview of positively identified organic compounds in diapers

DIAPER-1 - 171107-0099

Nonylphenol	0,14	mg/kg
1,2-benzisothiazoline-3-one (BIT)	1,6	mg/kg
2-methyl-4-isothiazolin-3-one (MIT)	0,44	mg/kg
2,3,7,8-TCDF	0,17	ng/kg
1,2,3,7,8-PeCDF	0,076	ng/kg
2,3,4,7,8-PeCDF	0,060	ng/kg
1,2,3,4,7,8-HxCDF	0,042	ng/kg

DIAPER-2 - 171107-0100

Glyphosate	0,072	mg/kg
AMPA	0,18	mg/kg
2,3,7,8-TCDF	0,071	ng/kg
2,3,4,7,8-PeCDF	0,056	ng/kg
1,2,3,4,7,8-HxCDF	0,053	ng/kg
1,2,3,6,7,8-HxCDF	0,043	ng/kg
1,2,3,6,7,8-HxCDD	0,038	ng/kg

DIAPER-3 - 171107-0101

nonylphenol	0,051	mg/kg
6-caprolactam	0,46	mg/kg
2,3,7,8-TCDF	0,10	ng/kg
1,2,3,4,7,8-HxCDF	0,043	ng/kg

DIAPER-4 - 171107-0102

Glyphosate	0,13	mg/kg
AMPA	0,18	mg/kg
nonylphenol	0,07	mg/kg
6-caprolactam	0,46	mg/kg
2,3,7,8-TCDF	0,05	ng/kg
1,2,3,4,7,8-HxCDF	0,04	ng/kg

DIAPER-5 - 171107-0103

Phtalate DBP	0,16	mg/kg
Phtalate DEHP	0,39	mg/kg
nonylphenol	2,1	mg/kg
2-methyl-4-isothiazolin-3-one (MIT)	0,019	mg/kg

DIAPER-6 - 171107-0104

nonylphenol	0,32	mg/kg
6-caprolactam	0,48	mg/kg
2,3,7,8-TCDF	0,051	ng/kg

DIAPER-7 - 171107-0105

Nonylphenol	0,32	mg/kg
6-caprolactam	0,15	mg/kg

DIAPER-8 - 171107-0106

Nonylphenol	0,087	mg/kg

DIAPER-9 - 171107-0107

all below LOQ	

DIAPER-10 - 171107-0108

Nonylphenol	0,065	mg/kg
6-caprolactam	0,59	mg/kg
2-methyl-4-isothiazolin-3-one (MIT)	0,028	mg/kg

DIAPER-11 - 171107-0109

Nonylphenol	0,11	mg/kg
6-caprolactam	0,20	mg/kg
2,3,7,8-TCDF	0,057	ng/kg

DIAPER-12 - 171107-0110

Nonylphenol	0,046	mg/kg
2,3,7,8-TCDF	0,078	ng/kg

DIAPER-13 - 171107-0111

Nonylphenol	1,1	mg/kg

DIAPER-14 - 171107-0112

Nonylphenol	3,4	mg/kg
6-caprolactam	0,075	mg/kg
1,2,3,6,7,8-HxCDF	0,018	ng/kg
2,3,4,6,7,8-HxCDF	0,19	ng/kg
1,2,3,7,8,9-HxCDF	0,065	ng/kg
1,2,3,7,8,9-HxCDD	0,085	ng/kg
1,2,3,4,6,7,8-HpCDF	0,91	ng/kg

DIAPER-15 - 171107-0113

Nonylphenol	0,063	mg/kg
2,3,7,8-TCDF	0,054	ng/kg

DIAPER-16 - 171107-0114

Nonylphenol	0,27	mg/kg
6-caprolactam	0,35	mg/kg

DIAPER-17 - 171107-0115

Nonylphenol	4,4	mg/kg
2,3,7,8-TCDF	0,068	ng/kg

DIAPER-18 - 171107-0116

Nonylphenol	0,038	mg/kg
6-caprolactam	0,19	mg/kg

DIAPER-19 - 171107-0117

6-caprolactam	0,029	mg/kg

DIAPER-20 - 171107-0118

Nonylphenol	0,19	mg/kg

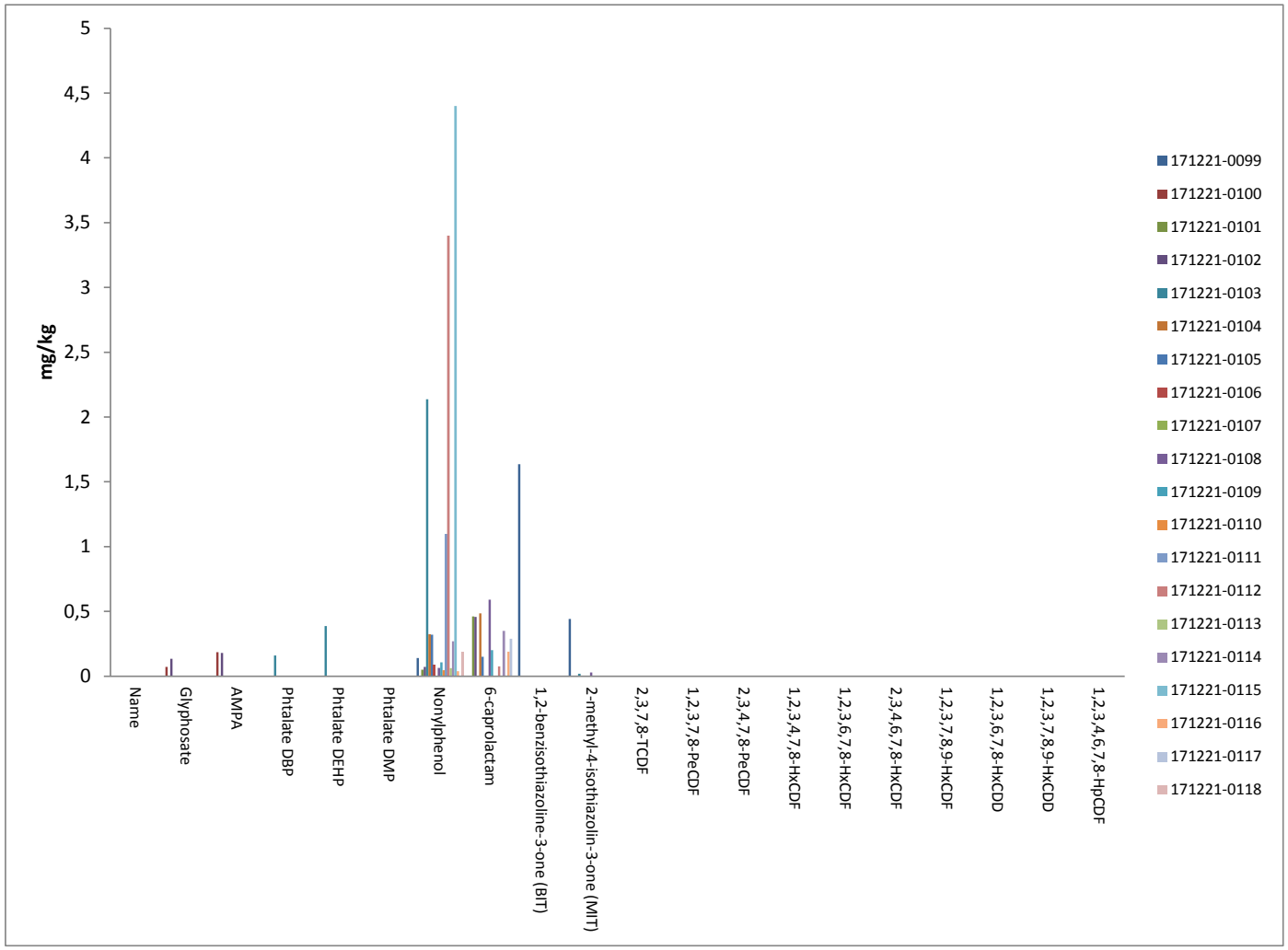
Table 5: WHO toxicity equivalent factors (TEF)

	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)

Sample		PCDD/F conc ng TEQ/kg	LOQ ng TEQ/kg
Diaper-1	171221-0099	0,2	0,19
Diaper-2	171221-0100	0,19	0,18
Diaper-3	171221-0101	0,17	0,16
Diaper-4	171221-0102	0,18	0,18
Diaper-5	171221-0103	0,61	0,61
Diaper-6	171221-0104	0,18	0,18
Diaper-7	171221-0105	0,18	0,18
Diaper-8	171221-0106	0,18	0,18
Diaper-9	171221-0107	0,17	0,17
Diaper-10	171221-0108	0,18	0,18
Diaper-11	171221-0109	0,16	0,16
Diaper-12	171221-0110	0,27	0,27
Diaper-13	171221-0111	0,19	0,19
Diaper-14	171221-0112	0,35	0,32
Diaper-15	171221-0113	0,18	0,18
Diaper-16	171221-0114	0,2	0,2
Diaper-17	171221-0115	0,18	0,17
Diaper-18	171221-0116	0,18	0,18
Diaper-19	171221-0117	0,18	0,18
Diaper-20	171221-0118	0,16	0,16

Figure 2: Schematic overview of organic substances and concentrations detected in diapers



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| + $2\sqrt{(\mathrm{CV}_{Sbetween})^2}$

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.

2.8. CONFIRMATION

Based on the first results, the samples containing target compounds in concentrations higher than LOQ, were selected for confirmation. Reanalysis of the samples was conducted starting from a new diaper and repeating the sample preparation, extraction, clean-up etc.

CHAPTER 3 CONCLUSION

In this analytical study the concentrations of selected organic substances have been determined in extracts of diapers 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 nonylphenol and caprolactam. A possible source of caprolactam are nylon threads or maybe poly(ether-amide)elastomers, although we do not know if this material is used in diapers. 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.

For nonylphenol this can be different, as 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 and its importance should be further investigated and that additional measures should be taken to maximally reduce the contamination of diapers with nonylphenol.

Other compounds that were detected in somewhat higher concentrations were methyl and butyl isothiazolinone (MIT, BIT). 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 2 diapers, in concentrations of ca 0.1 mg/kg. The origin of these compounds in diapers is not clear.

As a general conclusion it can be stated that baby diapers are free of or only contain negligible amounts of the investigated harmful, carcinogenic or reprotoxic chemicals. An exception is made for nonylphenol for which an additional evaluation study might be necessary before a definite conclusion can be taken with regard to the health risks associated with the occurrence of this compound in diapers.

ANNEX A: GLYPHOSATE AFTER DERIVATIZATION WITH LC-MS/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 acidified water (the diaper 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

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 - 2 hours. Around 10 gram was used for intake (corresponding to 1 diaper) and the diapers were extracted with 200 mL of aceton/n-hexane (20/80; v/v) (the diaper 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 AND PESTICIDES WITH 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 2 hours. Around 10 gram was used for intake (corresponding to 1 diaper) and the diapers were extracted with 150 mL of dichloromethane (the diaper was completely immersed in the extraction solvent). The complete extract was concentrated under nitrogen to a final weight of 10 g. From the 10 gram extract 190 µL was taken and a recovery standard (13C-PCB-180) was added before injection into the GC-MS.

→ Standards and solutions

Individual stock standard solutions methamidophos, monocrotophos, methylparation, chlorpyrifos-ethyl, malathion, alpha endosulfan, béta-endosulfan, bis(2-ethylhexyl)phthalate (DEHP), diisononyl phthalate (DINP), dimethylphthalate (DMP), Dibutylphthalate (DBP) and internal standards (D6-methamidophos, 13C-PCB-101, D4-DEHAP, 13C-PCB-180 were prepared in dichloromethane. Working standard solutions, containing a mixture of either all target compounds or internal standards, were prepared in dichloromethane 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.

→ 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 60 °C (1 min) to 325 °C (4 min) at 25 °C min^{-1}. The total runtime 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.

		RT (min)	*Mass 1*	*Mass 2*	*Mass 3*	*width*	*dwell time*
window 1	D6-methamidophos	5.96	97	99		1	25
5 - 8.5	methamidophos	5.98	94	95			
min.	DMP	6.89	163	77			
	monocrotophos	8.33	127	192			
window 2	DBP	8.83	149	223			
8.5 - 9.4	parathion-methyl	9.04	109	125			
min.	chlorpyrifos-ethyl	9.11	314	316			
	malathion	9.13	173	125			
window 3	13C-PCB-101	9.64	338	340			
9.4 - 10.2	alfa-endosulfan	9.77	195	241	193		
min.	13C-p,p'-DDE	9.89	258	260			
window 4	bèta-endosulfan	10.49	195	241	193		

10.2 - 10.7	D4 DEHP	10.53	153	171	
min.	DEHP	10.55	149	167	279
window 5	endosulfansulfate	10.82	272	274	
10.7 - 15	DINP	10.7-12	149	127	307
min.	13C-PCB-180	11.03	406	408	167

→ **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

The baby diapers (n=20) 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. 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). The extraction was done with ultrasonication for 1 hour, followed by 1 hour shaking. From the 200 mL 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 3.21 kV was used for all compounds. The source offset was 30 V. The cone voltage and collision energy were compound-dependent (Table below).

componenten	Parent ion	Daughter ion Q	dwell time	cone V	Collision E	ionisation mode	calibration
methylparaben (2.0-3.5min)	151	92	0.03	30	20	ES -	external
ethylparaben (2.0-4.0min)	165	92	0.03	30	20	ES -	external
propylparaben (3.5-5.0min)	179	92	0.03	30	20	ES -	external
butylparaben (4.0-5.5min)	193	92	0.04	30	20	ES -	internal

13C-butylparaben (4.0-5.5min)	199	98	0.04	30	20	ES -	
4-t-octylfenol (6.2-7.5min)	205	133	0.03	30	20	ES -	internal
13C-4-t-octylfenol (6.2-7.5min)	211	139	0.03	30	20	ES -	
nonylfenol (7.0-9.0min)	219	133	0.06	30	20	ES -	internal
13C-nonylfenol (7.0-9.0min)	225	139	0.06	30	20	ES -	
Bisfenol S (1.5-3.0min)	249	108	0.03	30	20	ES -	internal
dodecylfenol (8.0-10.0min)	261	133	0.06	30	20	ES -	external
dichlorophen (4.5-6.0min)	267	127	0.04	30	20	ES -	external
Triclosan (6.0-7.0min)	289	35	0.03	30	20	ES -	external
PFOA (3.8-5.0min)	413	369	0.04	30	20	ES -	internal
13C-PFOA (3.8-5.0min)	417	372	0.04	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

The baby diapers (n=20) 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. 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). The extraction was done with ultrasonication for 1 hour, followed by 1 hour shaking. From the 200 mL, 10 mL was taken and further 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 abd terbutylazine 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 3.21 kV was used for all compounds. The source offset was 30 V. The cone voltage and collision energy were compound-dependent (Table below).

compounds	*Parent ion*	*Daughter ion Q*	*dwell time*	*cone V*	*Collision E*	*ionisatie mode*	*calibration*
6-Captrolactam (0-10min)	114	79	0.01	30.00	20	ES +	external
MIT (0.0-5.0min)	116	101	0.01	30.00	20	ES +	internal
MIT-D3 (0.0-5.0min)	119	102	0.01	30.00	20	ES +	
methamidophos (0.0-5.0min)	142	94	0.01	30.00	20	ES +	external
CMIT (0.0-5.0min)	150	115	0.01	30.00	20	ES +	internal
CMIT-D3 (0.0-5.0min)	153	118	0.01	30.00	20	ES +	
BIT (0.0-5.0min)	152	109	0.01	30.00	20	ES +	internal
BIT-13C (0.0-5.0min)	158	115	0.01	30.00	20	ES +	
Aldicarb (2.0-3.5min)	208	89	0.01	30.00	20	ES +	internal
OIT (0.0-10.0min)	214	102	0.01	30.00	20	ES +	external
monocrotophos (0.0-2.0min)	224	127	0.01	30.00	20	ES +	external
sebutylazine (4.0-6.0min)	230	96	0.01	30.00	20	ES +	external
tertutylazine (4.0-6.0min)	230	174	0.01	30.00	20	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 runtime 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.

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
alfa-methylstyrene	18.63	118	117	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**

The cotton (textile) part of the diaper is used for analysis. Polyacrylate (or other superadsorbent) grains were removed before extraction.

→ **Sample extraction and clean up**

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

→ **HRGC-MS**

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