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NF VALIDATION
Validation of alternative analytical methods
Application in food microbiology

Summary report

EN ISO 16140 validation study of the 3M™ Molecular Detection Assay *Salmonella* for the detection of *Salmonella* spp in food products and environmental samples

Qualitative method

This report includes 109 pages, with 11 appendixes.
Only copies including the totality of this report are authorised.

Competences of the laboratory are certified by COFRAC accreditation for the analyses marked with symbol◆.

Version 0
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Before comment

Quality assurance documents related to this study can be consulted upon request from 3M.

The technical protocol and the result interpretation were realised according to the EN ISO 16140 and the AFNOR technical rules.

- ✓ **Company**: 3M
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- ✓ **Expert Laboratory**: ADRIA Développement
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- ✓ **Studied method:** **3M™ Molecular Detection Assay *Salmonella* for detection of *Salmonella* spp**

- ✓ **Validation standard**: EN ISO 16140 (October 2003) : Food microbiology – Protocol for the validation of alternative methods

- ✓ **Reference method**♦ : NF EN ISO 6579 (2002): Horizontal method for the detection of *Salmonella* spp.

- ✓ **Scope:** **All food products and production environmental samples *(excluding primary production environmental samples)***

- ✓ **Certification body:** AFNOR Certification

♦ Analyses performed according to the COFRAC accreditation

1 INTRODUCTION

The validation study of the **3M™ Molecular Detection Assay *Salmonella*** for the detection of *Salmonella* spp was performed according to the EN ISO 16140 (2003) protocol and the AFNOR technical rule, with the certificate number 3M 01/11 - 11/12:

- In November 2012 for meat products, dairy products and egg products (*except milk powders)*,

- In January 2013 for the extension study for seafood and vegetables, and environmental samples,

- In March 2014 for the extension study for spices and aromatic herbs, concentrates and culinary products, cocoa and cocoa based products, milk powders,

- In June 2016 for the renewal study validation.

2 METHODS PROTOCOLS

2.1 Reference method protocol ♦

The reference method corresponds to the ISO 6579 standard: Horizontal method for the detection of *Salmonella* spp (See ***Appendix 1***).

2.2 Alternative method protocol

The **3M Molecular Detection Assay *Salmonella*** uses isothermal amplification of specific DNA target sequences, and the amplified sequences are detected by bioluminescence.

❒ ***Protocols*** (see **Appendix 2**)

Six protocols are available depending on background microflora levels of the tested samples and food types:

♦ Analysis performed according to the COFRAC accreditation

- **Protocol 1 for samples with low background microflora**:
    * enrichment step during 18 – 24 h at 37°C in non pre-warmed 3M Buffered Peptone Water (BPW) - 1/10 dilution
    * DNA extraction on 20 µl enrichment broth
    * DNA amplification on 20 µl lysate

- **Protocol 2 for samples with high background microflora**:
    * enrichment step during 18 – 24 h at 41.5°C in pre-warmed 3M Buffered Peptone Water (BPW) - 1/10 dilution
    * DNA extraction on 20 µl enrichment broth
    * DNA amplification on 20 µl lysate

- **Protocol 3 for milk powders**:
    * enrichment step during 20 - 26 h at 37°C in non pre-warmed 3M Buffered Peptone Water (BPW) - 1/10 dilution
    * DNA extraction on 20 µl enrichment broth
    * DNA amplification on 20 µl lysate

- **Protocol 4 for cocoa and cocoa based products**:
    * enrichment step during 24 - 30 h at 37°C in non pre-warmed UHT non fat milk with Brilliant green 450 µl of a 1 % solution - 1/10 dilution
    * DNA extraction on 20 µl enrichment broth
    * DNA amplification on 20 µl lysate

- **Protocol 5 for spices and aromatic herbs**:
    * enrichment step during 18 – 24 h at 37°C in non pre-warmed 3M Buffered Peptone Water (BPW), supplemented with 0.5 % K_2SO_3 - 1/20 dilution
    * DNA extraction on 10 µl enrichment broth
    * DNA amplification on 20 µl lysate

- **Protocol 6 for concentrates and culinary products, tea, coffee**:
    * enrichment step during 18 – 24 h at 37°C in non pre-warmed 3M Buffered Peptone Water (BPW) - 1/20 dilution
    * DNA extraction on 10 µl enrichment broth
    * DNA amplification on 20 µl lysate

- **Real time detection**,

- **Confirmation**
  * Option 1: by the whole protocol of the reference method,
  * Option 2: by performing only an enrichment step in RVS (0.1 mL BPW in 10 mL RVS) for 24 h ± 3 h at 41.5°C ± 1°C and streaking onto a selective agar (XLD or chromogenic media) (followed by a latex (oxoid) test performed directly on isolated colonies).
  * Option 3: Using nucleic acid probes as described in the EN ISO 7218 standard, performed on isolated colonies, from XLD or chromogenic agar (see Option 1 or 2). This test must not be performed using the 3M Molecular Detection Assay *Salmonella.*
  * Option 4: Using any other method certified NF Validation, the principle of which must be different from 3M Molecular Detection Assay *Salmonella*. The complete protocol described for this second validated method must be used. All steps prior to the start of confirmation must be common to both methods.

Enrichment and lysate storage for 72 h at 2 - 8°C were also evaluated on positive samples in order to offer sufficient practicability to the users. This was done for the positive samples in the relative accuracy, specificity and selectivity study.

3 INITIAL VALIDATION STUDY AND EXTENSION STUDIES: RESULTS

3.1 Method comparison study

3.1.1 Relative accuracy, relative specificity and relative sensitivity

The relative accuracy is the closeness of agreement between a test result and the accepted reference value.
The relative specificity is defined as the degree to which a method is affected (or not) by the other components present in a multi-component sample; that is, it is the ability of the method to measure exactly a given analyte, or its amount, within the sample without interference from non-target components such as matrix effect or background noise.
The r*elative sensitivity is defined as the ability of the alternative method to detect two different amounts of analyte measured by the reference method within a given matrix over the whole measurement range; that is, it is the minimal quantity variation (increase of the analyte concentration x) which gives a significant variation of the measured signal (response y).*

3.1.1.1 Number and nature of samples

The repartition of the analysed samples during the different studies is the following:

- 199 samples during the initial validation study (2012),
- 126 samples during the first extension study (2013)
- 289 samples during the second extension study (2014).

If we take into account all the categories (initial validation study, both extension studies), 614 samples were analysed; the distribution per tested category, type and pre-enrichment protocol is given in Table 1:

Table 1 - Distribution per tested category and type

Initial validation study (2012) and extension study (2013)								
Category	Type	Positive samples		Negative samples		Total		TOTAL
		Protocol 1	Protocol 2	Protocol 1	Protocol 2	Protocol 1	Protocol 2	
Meat products	Fresh meat (unprocessed)	0	10	0	10	0	20	20
	Minced meat products and raw meat preparation	0	13	0	12	0	25	25
	RTE product	7	0	8	0	15	0	15
	Total	**7**	**23**	**8**	**22**	**15**	**45**	**60**
Dairy products	Thermisation/pasteurised products	4	0	23	0	27	0	27
	Fermented / acidified products	0	15	0	14	0	29	29
	Raw milk based products	0	13	0	10	0	23	23
	Total	**4**	**28**	**23**	**24**	**27**	**52**	**79**
Egg products	Egg powder	0	10	0	10	0	20	20
	Liquid egg products	10	0	10	0	20	0	20
	Egg based products	10	0	10	0	20	0	20
	Total	**20**	**10**	**20**	**10**	**40**	**20**	**60**
Seafood and vegetables	Fresh, raw, frozen products	0	10	0	11	0	21	21
	Heat treated products	9	0	10	0	19	0	19
	Composite foods (salads with dressings, sandwiches, …)	12	0	9	0	21	0	21
	Total	**21**	**10**	**19**	**11**	**40**	**21**	**61**
Environmental samples	Swabs, wipes	0	12	0	13	0	25	25
	Process water	0	12	0	13	0	25	25
	Dusts, siphons	0	9	0	6	0	15	15
	Total	**0**	**33**	**0**	**32**	**0**	**65**	**65**
	TOTAL	**52**	**104**	**70**	**99**	**122**	**203**	**325**

(Table 1)

Extension study (2014)				
Category	**Type**	**Positive samples**	**Negative samples**	**TOTAL**
Milk powders Protocol 3	Milk powder	15	10	25
	Infant formula without probiotics	10	19	29
	Infant formula with probiotics	10	3	13
	Total	**35**	**32**	**67**
Cocoa and cocoa based products Protocol 4	Powder	14	12	26
	Raw material	9	8	17
	Cocoa based products	9	11	20
	Total	**32**	**31**	**63**
Spices and aromatic herbs Protocol 5	Spices	10	24	31
	Aromatic herbs	10	14	24
	Dehydrated onions, garlic, etc.	10	4	14
	Total	**30**	**42**	**72**
Concentrates and culinary products, tea, coffee Protocol 6	Culinary products	14	14	28
	Concentrates	8	14	22
	Instant tea and coffee	9	28	37
	Total	**31**	**56**	**87**
	TOTAL	**128**	**161**	**289**
	All samples (initial validation study and extensions)	**284**	**330**	**614**

3.1.1.2 Artificial contamination of samples

Artificial contaminations were done by spiking and cross-contamination. For sample spiking, strains were stressed using various injury protocols. The injury efficiency was evaluated by comparing enumeration results onto selective and non selective agars (respectively XLD and TSYE). The artificial contaminations are presented in **Appendix 3**.

5 samples were inoculated at a level > 30 CFU; all gave negative results. They are listed in table 2.

Table 2

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
5131	**Dehydrated basil leaves**	Salmonella Infantis Ad1646	Compost	HT 8 min 56°C	0.66	36-35-54-42-48(43.0)	-
5513	**Oriental spices**	Salmonella Mbandaka Ad1723	Compost	HT 8 min 56°C	1.85	45-32-49-53-37(43.2)	-
5514	**Oriental spices**	Salmonella Mbandaka Ad1723	Compost	HT 8 min 56°C	1.85	79-64-66-66-60(67.0)	-
523	**Concentrate (onions)**	Salmonella Typhimurium Ad1546	Compost	HT 8 min 56°C / 30 days 4°C	1.93	36-37-19-32-46(36.0)	-
680	**Spices for tagine**	Salmonella Virchow F276	Curry	Lyophilised + product (contact 72h)	0	37-44-41-39-41 (40.4)	-

Globally, 395 samples were inoculated, 258 gave a positive result: 65.3 % of the artificial contamination were positive, confirming the fractional recovery testing. The repartition of inoculated samples and positive samples per inoculation level is provided figures 1 and 2.

Note that the contaminations above 10 CFU/sample concerned mainly the samples analysed with Protocols 4, 5 and 6.

Figure 1 – Inoculation levels used for spiking

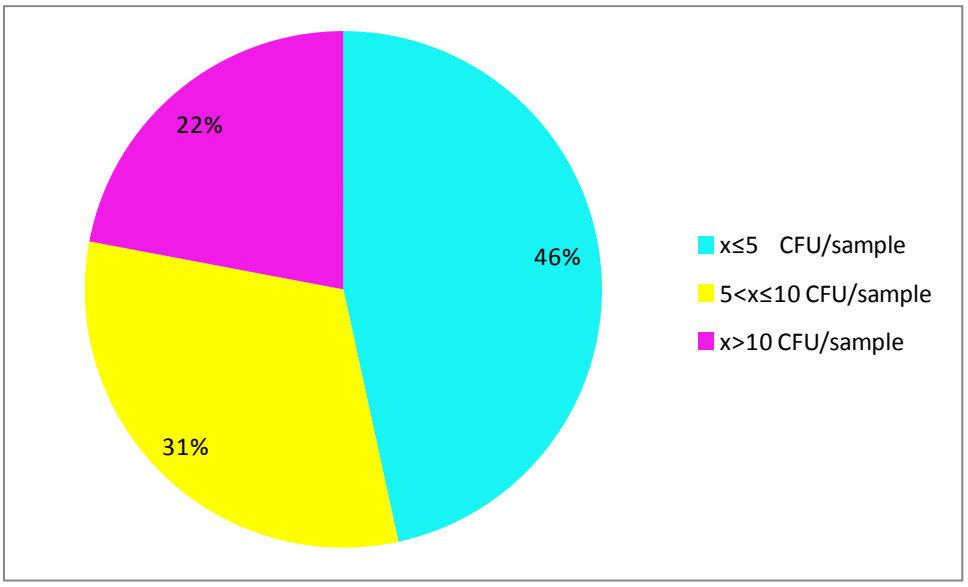
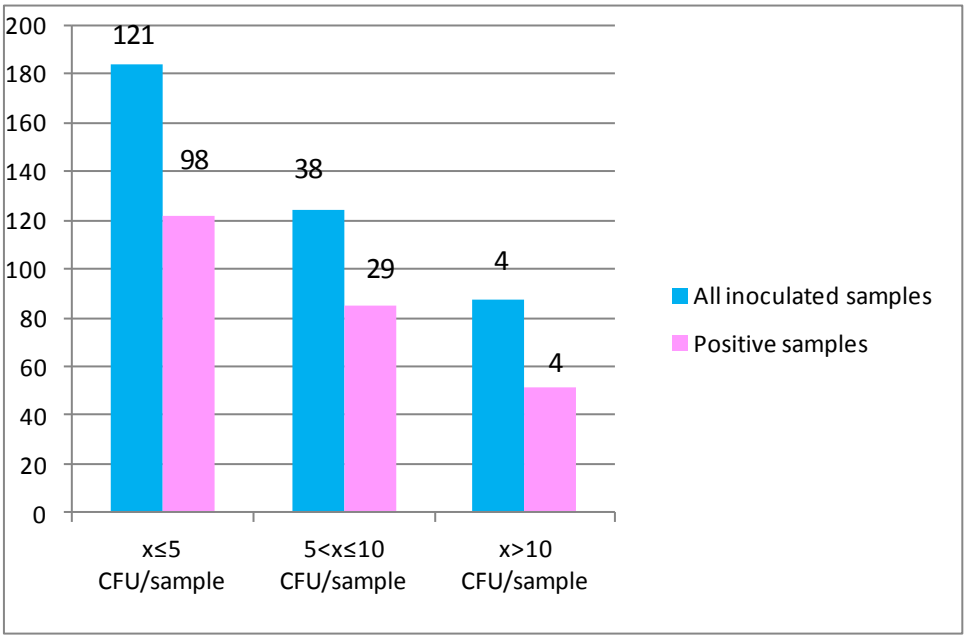


Figure 2 – Inoculated and positive samples according to the level of contamination



Taking into all the categories, 9.2 % of the samples were naturally contaminated.

3.1.1.3 Confirmation protocols

The positive results of the 3M™ Molecular *Salmonella* method were confirmed with the ISO 6579 tests, or by subculture in RVS broth, streaking onto XLD or ASAP plates and latex tests directly on isolated colonies. The *Salmonella* latex test from OXOID was used during this study.

3.1.2 Test results

The raw data are given in **Appendix 4**.

The table 3 gathers the results of the full validation study claim. A summary of results obtained with the reference and the alternative method is given in tables 4 to 12; the paired results per protocol are given in tables 13 and 14.

Table 3 – Summary of results obtained with the reference and the alternative method: All products

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 207**	Positive deviation (R-/A+) **PD = 45**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 32 (PPND = 1)**	Negative agreement (A-/R-) **NA = 330 (PPNA = 3)**

Table 4 – Summary of results obtained with the reference and the alternative method: Meat products (processed and unprocessed) (Protocols 1 and 2)

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 18**	Positive deviation (R-/A+) **PD = 8**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 4 (PPND = 1)**	Negative agreement (A-/R-) **NA = 30**

PP: positive presumptive non confirmed samples

PD = positive deviation (R-/A+) ND = negative deviation (A-/R+)

Table 5 – Summary of results obtained with the reference and the alternative method: Dairy products (Protocols 1 and 2)

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 29**	Positive deviation (R-/A+) **PD = 1**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 2**	Negative agreement (A-/R-) **NA = 47**

Table 6 – Summary of results obtained with the reference and the alternative method: Egg products (Protocols 1 and 2)

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 29**	Positive deviation (R-/A+) **PD = 0**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 1**	Negative agreement (A-/R-) **NA = 30**

Table 7 – Summary of results obtained with the reference and the alternative method: Seafood and vegetables (Protocols 1 and 2)

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 27**	Positive deviation (R-/A+) **PD = 1**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 3**	Negative agreement (A-/R-) **NA = 30**

Table 8 – Summary of results obtained with the reference and the alternative method: Environmental samples (Protocols 1 and 2)

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 29**	Positive deviation (R-/A+) **PD = 1**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 3**	Negative agreement (A-/R-) **NA = 32 (PPNA = 2)**

Table 9 – Summary of results obtained with the reference and the alternative method: Milk powders (Protocol 3)

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 31**	Positive deviation (R-/A+) **PD = 2**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 2**	Negative agreement (A-/R-) **NA = 32**

Table 10 – Summary of results obtained with the reference and the alternative method: Cocoa and cocoa based products (Protocol 4)

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 21**	Positive deviation (R-/A+) **PD = 5**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 6**	Negative agreement (A-/R-) **NA = 31**

Table 11 – Summary of results obtained with the reference and the alternative method: Spices and aromatic herbs (Protocol 5)

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 14**	Positive deviation (R-/A+) **PD = 14**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 2**	Negative agreement (A-/R-) **NA = 42**

Table 12 – Summary of results obtained with the reference and the alternative method: Concentrates and culinary products, tea, coffee (Protocol 6)

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 9**	Positive deviation (R-/A+) **PD = 13**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 9**	Negative agreement (A-/R-) **NA = 56 (PPNA = 1)**

Table 13 – Summary of results obtained with the reference and the alternative method: Protocol 1

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 50**	Positive deviation (R-/A+) **PD = 0**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 2**	Negative agreement (A-/R-) **NA = 70**

Table 14 – Summary of results obtained with the reference and the alternative method: Protocol 2

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (A+/R+) **PA =82**	Positive deviation (R-/A+) **PD = 11**
Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 11 (PPND = 1)**	Negative agreement (A-/R-) **NA = 99 (PPNA = 2)**

3.1.2.1 Calculation of relative accuracy (AC), relative sensitivity (SE) and relative specificity according to the ISO 16140 (2003)

The calculations are presented in table 15.

Table 15 – Calculation of relative accuracy (AC), relative sensitivity (SE) and relative specificity (SP)

Category	PA	NA	ND	PD	N	Relative accuracy AC (%) [100x(PA+NA])/N]	N+ PA + ND	Relative sensitivity SE (%) [100xPA]/N+]	N- NA + PD	Relative specificity SP (%) [100xNA]/N-]
Meat products	18	30	4	8	60	80.0	22	81.8	38	78.9
Dairy products	29	47	2	1	79	96.2	31	93.5	48	97.9
Egg products	29	30	1	0	60	98.3	30	96.7	30	100.0
Seafood and vegetables	27	30	3	1	61	93.4	30	90.0	31	96.8
Environmental samples	29	32	3	1	65	93.8	32	90.6	33	97.0
Spices and aromatic herbs	14	42	2	14	72	77.8	16	87.5	56	75.0
Concentrates and culinary products	9	56	9	13	87	74.7	18	50.0	69	81.2
Cocoa and cocoa based products	21	31	6	5	63	82.5	27	77.8	36	86.1
Milk powders	31	32	2	2	67	94.0	33	93.9	34	94.1
All products	**207**	**330**	**32**	**45**	**614**	**87.5**	**239**	**86.6**	**375**	**88.0**

The alternative method percentage values are:

*Relative accuracy : **AC***	87.5 %
*Relative specificity : **SP***	88.0 %
*Relative sensitivity : **SE***	86.6 %

Sensitivity of both methods, when the positive deviations of the alternative method are considered, is presented below:

Alternative method	88.7 %
Reference method	84.2 %

3.1.2.2 Analysis of discordants

The repartition of negative and positive deviations per type of contamination is provided in table 16.

Table 16

	Negative deviations	Positive deviations
Naturally contaminated	5	8
Artificially contaminated	27	37
Total	**32**	**45**

For all tested samples and categories, the analysis of the discordants is:

$Y = ND + PD = 32 + 45 = 77$
$Y > 22$
$d = |PD - ND| = 45 - 32 = 13$
$\chi^2 = d^2/Y = 2.19$
$\chi^2 < 3.841$; the two methods are not different at $\alpha < 0.05$.

3.1.2.3 Confirmations

The confirmations were performed with the tests of the reference method and by subculture in RVS broth, streaking onto selective agar, and performing a latex test directly on isolated colonies.

It was possible to confirm the presence of *Salmonella* in all the positive samples by performing an OXOID latex test on XLD plates after subculture in RVS broth.

3.1.2.4 Matrix Control (MC) and inhibitions

The Matrix Control test was run in combination to the MDS test for the extension study run in 2014, due to the tested categories which are known to be potentially inhibitory.

569 MDS tests were performed and 13 Matrix Control inhibitions were observed (2.3 %) on those products known to have “inhibitory” properties on polymerase reactions. Taking account the information provided by the use of the Matrix Control, had at least no impact on the results.

3.1.2.5 Enrichment broth and lysate storage at 2 - 8°C for 72 h

The positive samples enrichment broths of the alternative method were stored at 2 - 8°C for 72 h and analysed a second time. Both were tested, the enrichment broth storage and the lysate storage.

The analysis of discordant results became:

- for BPW storage

$Y = ND + PD = 32 + 48 = 80$
$d = 16$
$\chi^2 = d^2/Y = 3.2$
$\chi^2 < 3.841$; the two methods are not different at $\alpha < 0.05$.

- for lysate storage

$Y = ND + PD = 32 + 43 = 75$
$d = 11$
$\chi^2 = d^2/Y = 1.61$
$\chi^2 < 3.841$; the two methods are not different at $\alpha < 0.05$.

3.1.3 Relative detection level

The relative detection level is the smallest number of culturable micro-organisms that can be detected in the sample in 50% of occasions by the alternative and reference methods.

3.1.3.1 Matrices

The objective of this study is (i) to determine the target species minimal quantity that can be detected in food matrices, (ii) to compare both method results.

Detection limits were defined by analysing the different matrix/strain pairs. Four levels were tested. Six replicates of each combination were prepared.

The following matrices were tested:

Matrix	Strain	Protocol
Ground beef	*Salmonella* Infantis 128	Protocol 2
Pasteurized liquid egg	*Salmonella* Enteritidis 465	Protocol 1
Raw milk	*Salmonella* Montevideo 916	Protocol 2
Spinach	*Salmonella* Virchow F276	Protocol 2
Process water	*Salmonella* Livingstone A00E058	Protocol 2
Milk powder with probiotics	*Salmonella* Anatum Ad298	Protocol 3
Cocoa powder	*Salmonella* Braenderup Ad1661	Protocol 4
Cinnamon	*Salmonella* Agona Ad1725	Protocol 5
Culinary product	*Salmonella* Indiana 2	Protocol 6

3.1.3.2 Contamination protocol

Contaminations and enumerations were realised according to the AFNOR technical rules (protocol for low level inoculations). The contamination levels are presented below:

The inoculation's levels were the following:

- 0 CFU/ g or ml,
- level required to get 0 to 50 % positive samples,
- level required to get 50 to 75 % positive samples,
- level required to get 75 to 100 % positive samples.

The samples were analysed by both methods, and the background microflora were enumerated.

3.1.3.3 Results

The data are given in ***Appendix 5***. Detection levels are presented in the table 15.

Table 17 – Relative detection level results

Strain / matrix pairs	Relative detection level (CFU / 25 g) according to Spearman-Kärber test[1]	
	Reference method	Alternative method
Ground beef / *Salmonella* Infantis 128	0.9 [0.5; 1.4]	0.4 [0.3; 0.8]
Raw milk / *Salmonella* Montevideo 916	0.9 [0.6; 1.4]	1.0 [0.5; 1.7]
Pasteurized liquid egg /*Salmonella* Enteritidis 465	0.6 [0.3; 1.1]	0.6 [0.3; 1.1]
Spinach / *Salmonella* Virchow F276	0.7 [0.4; 1.1]	0.8 [0.4; 1.5]
Process water / *Salmonella* Livingstone A00E058	0.9 [0.5; 1.8]	1.0 [0.5; 2.0]
Cinnamon / *Salmonella* Agona Ad 1725	1.7 [1.0; 2.8]	2.1 [1.2; 3.6]
Culinary product / *Salmonella* Indiana 2	0.8 [0.4; 1.6]	0.6 [0.3; 1.2]
Cocoa powder / *Salmonella* Braenderup Ad 1661	0.7 [0.4; 1.1]	0.7 [0.4; 1.3]
Milk powder with probiotic / *Salmonella* Anatum Ad 298	0.9 [0.6; 1.3]	0.7 [0.4; 1.1]

3.1.4 Conclusion

The relative detection level varies from 0.3 to 2.8 CFU/25 g for the reference method and from 0.3 to 3.6 CFU/25 g for the alternative method.
The alternative and the standard methods show similar detection levels.

[1] *"Hitchins A. Proposed Use of a 50 % Limit of Detection Value in Defining Uncertainty Limits in the Validation of Presence-Absence Microbial Detection Methods, Draft 10th December, 2003".*

3.1.5 Inclusivity / exclusivity

Inclusivity is the ability of the alternative method to detect the target analyte from a wide range of strains.

Exclusivity is the lack of interference from a relevant range of non-target strains of the alternative method.

3.1.5.1 Test protocols

❒ **Inclusivity**

Salmonella strains cultures were performed in BHI medium at 37°C. Dilutions were done in order to inoculate between 10 to 100 cells/225 ml in pre-warmed BPW. The BPW was then incubated 18 h at 41.5°C and the alternative method was then performed.

❒ **Exclusivity**

Negative strains cultures were performed in BHI at 37°C. Dilutions were realized in order to inoculate 10^5 cells/ml BPW. The BPW was incubated 22 h at 37°C and the alternative method was then performed

3.1.5.2 Results

The data are given in **Appendix 6**.

❒ **Inclusivity**

All the 50 *Salmonella* strains gave a positive MDS result.

❒ **Exclusivity**

No cross reaction was observed with the 30 non target strains.

3.1.6 Practicability

The 3M™ Molecular *Salmonella* method practicability was evaluated according to the AFNOR criteria relative to method comparison study.

Storage conditions and shelf-life	The storage temperature is: 2 – 8°C. The shelf-life is given on the package. All the reagents must be stored at the temperature mentioned on the package.		
Reagents	All the reagents are ready-to-use.		
Time to result	Steps	**Reference Method**	**Alternative method**
	Negative samples		
	Sampling / pre-enrichment	Day 0	Day 0
	MDS test	/	Day 1
	Subculture in RVS / MKTTn	Day 1	/
	Streaking onto selective plates	Day 2	/
	Reading plates	Day 3	/
	Presumptive positive or positive results		
	Subculture in RVS and/or MKTTn	/	Day 1
	Streaking onto selective plates	/	Day 2
	Selective plates reading	/	Day 3
	Latex test	/	Day 3 (3)
	Confirmatory test	Day 4 to Day 6	Day 4 to Day 6 (4)
	(3) Confirmation by the tests described in the reference method (4) Confirmation by subculture in RVS followed by streaking onto XLD plate and latex test		
Common step with the reference method	Pre-enrichment step and confirmatory tests when Protocol 1 is applied. No common step if Protocol 2 is applied.		

Negative results are available within one day with the 3M™ Molecular *Salmonella* Test Kit. Depending on the confirmation protocol, the positive results are available between 4 and 6 days.

The workflow of the 3M™ Molecular *Salmonella* method allows shortening the handling time in comparison to the reference method.

3.2 Inter-laboratory study

3.2.1 Study organisation

Samples were sent to 18 laboratories. The study was done with ground beef samples contaminated with *Salmonella* Typhimurium A00C060.

Samples were inoculated and sent on Monday 8th October 2012, as described below:

- 24 codified samples (25 g) for *Salmonella* research by 3M™ Molecular Detection Assay *Salmonella* method,
- 24 codified samples (25 g) for *Salmonella* research by the reference method ISO 6579 (2002),
- 1 ground beef sample for aerobic mesophilic flora enumeration by ISO 4833 method,
- 1 water flask labelled “Temperature Control” with a sensor.

The analyses were started on Wednesday 10th October 2012.

The targeted inoculation levels were:

- 0 CFU/25 g,
- 1 – 10 CFU/25 g,
- 5 – 50 CFU/25 g.

8 samples were prepared per inoculation level, per method and per laboratory. Each laboratory received 24 samples to analyze by the reference method and 24 samples to analyze by the alternative method.

Blinded samples were placed in isothermal boxes, which contained cooling blocks, and express-shipped to the different laboratories.

A temperature control flask containing a sensor was added to the package in order to register the temperature profile during the transport, the package delivery and storage until analyses.

Samples were shipped in 24 h to 72 h to the involved laboratories. The temperature conditions had to stay lower or equal to 8.4°C during transport, and between 0°C – 8.4°C in the labs.

Collaborators and ADRIA Développement carried out the analyses with the alternative and reference methods at Day 2.

The collaborative study instructions were sent on 25th September 2012.

3.2.2 Experimental parameters control

3.2.2.1 *Contamination level before inoculation, levels obtained after the artificial contaminations of the samples*

- *Before inoculation*

In order to detect *Salmonella*, the ISO 6579 method was performed on five ground beef test portions (25 g) before the inoculation. All the results were negative.

- *Sample stability*

Sample stability was checked by inoculating the matrix at 100 CFU/g and 5 CFU/g. Enumerations were performed for the high contamination level and detection analyses were performed for the low contamination level. *Triplicata* were analysed, and the results were the following:

Table 18

Day	Reference method (research)			CFU/g (XLD)			Aerobic mesophilic flora (CFU/g)
	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3	
Day 0	+	+	+	150	160	170	$7.0\ 10^3$
Day 1	+	+	+	230	200	200	/
Day 2	+	+	+	170	150	160	$2.6\ 10^4$

No evolution was observed during storage at 4°C.

- *Contamination levels*

The contamination levels and the confidence intervals were:

Table 19

Level	Samples	Theoretical target level (b/25 g)	True level (b/25 g sample)	Low limit / 25 g sample	High limit / 25 g sample
Level 0	2 – 6 – 8 – 9 – 13 – 18 – 23 – 24	/	/	/	/
Low level	1 – 4 – 7 – 11 – 14 – 16 – 19 – 22	5	2.5	2.1	3.0
High level	3 – 5 – 10 – 12 – 15 – 17 – 20 - 21	25	21.9	19	25

3.2.2.2 Logistic conditions

Temperature conditions are given below:

Table 20 - Sample temperatures at receipt

Laboratories	Temperature measured by the sensor (°C)	Temperature measured at receipt (°C)	Receipt date and time	
A	3.0	4.0	09/10/2012 (Day 1)	10h10
B	4.0	5.0	09/10/2012 (Day 1)	10h30
C	5.5	8.9	09/10/2012 (Day 1)	10h45
D	12.5	12.6	11/10/2012 (Day 3)	12h20
E	4.0	3.3	09/10/2012 (Day 1)	11h00
F	*Sensor reprogrammed by the collaborator*	4.1	09/10/2012 (Day 1)	08h30
G	4.5	5.1	09/10/2012 (Day 1)	14h25
H	4.0	5.7	09/10/2012 (Day 1)	10h40
I	3.0	5.0	09/10/2012 (Day 1)	11h30
J	7.5	5.0	09/10/2012 (Day 1)	16h30
K	2.5	*No information*	09/10/2012 (Day 1)	11h00
L	3.0	4.0	09/10/2012 (Day 1)	10h00
M	3.5	5.4	09/10/2012 (Day 1)	09h15
N	3.0	14.0	09/10/2012 (Day 1)	14h25
O	3.0	4.7	09/10/2012 (Day 1)	12h25
P	2.5	3.8	09/10/2012 (Day 1)	11h30
Q	2.0	3.6	09/10/2012 (Day 1)	10h30
R	3.0	4.2	09/10/2012 (Day 1)	09h35

3.2.2.3 Conclusion

No problem was encountered during the transport or at receipt for 17 labs.

One Lab (D) received the package on Wednesday (Day 3) at 12.6°C.

The Lab N measured a temperature at receipt at 14.0°C, while the sensor measurement was 3°C at receipt.

The samples delivered to the Lab P seemed to have been stored below 0°C, but the Lab did not mention that the samples were frozen.

3.2.3 Results analysis

The raw data are given in **Appendix 7**.

3.2.3.1 Aerobic mesophilic flora enumeration

Depending on the Lab results, the enumeration levels varied from 1.1 10^3 to 6.5 10^5 CFU/g.

3.2.3.2 Expert lab results

Table 21 – Results obtained by the expert Lab.

Level	Reference method	Alternative method
L0	0/8	0/8
L1	8/8	8/8
L2	8/8	8/8

3.2.3.3 Collaborator lab results

18 Labs participated to the study. Only 17 Labs analysed the samples by the two methods. Lab D, which received his samples at Day 3, performed only the alternative method: the results are given for information.

Table 22 – Results obtained by the collaborator Labs.

Reference method

Laboratory	L0	L1	L2
A	0/8	8/8	8/8
B	0/8	8/8	8/8
C	0/8	8/8	8/8
D	Not tested		
E	0/8	8/8	8/8
F	0/8	8/8	**7/8**
G	0/8	8/8	8/8
H	**1/8**	8/8	8/8
I	0/8	8/8	8/8
J	0/8	8/8	8/8
K	**7/8**	8/8	8/8
L	**5/8**	8/8	8/8
M	0/8	8/8	8/8
N	**8/8**	8/8	8/8
O	**3/8**	8/8	8/8
P	**1/8**	8/8	8/8
Q	**1/8**	8/8	8/8
R	0/8	8/8	8/8

Alternative method before confirmation

Laboratory	L0	L1	L2
A	0/8	8/8	8/8
B	**2/8**	8/8	8/8
C	**2/8**	8/8	8/8
D *(Analysis at Day 3)*	2/8	8/8	8/8
E	**1/8**	8/8	8/8
F	**2/8**	8/8	7/8
G	**6/8**	8/8	8/8
H	**1/8**	8/8	8/8
I	**1/8**	8/8	8/8
J	3/8	8/8	8/8
K	**5/8**	8/8	8/8
L	**8/8**	8/8	8/8
M	**1/8**	8/8	8/8
N	**5/8**	8/8	8/8
O	**2/8**	8/8	8/8
P	**2/8**	8/8	8/8
Q	**1/8**	8/8	8/8
R	**2/8**	8/8	8/8

Alternative method after confirmation

Laboratory	L0	L1	L2
A	0/8	8/8	8/8
B	0/8	8/8	8/8
C	**2/8**	8/8	8/8
D	**1/8**	8/8	8/8
E	0/8	8/8	8/8
F	**1/8**	8/8	8/8
G	0/8	8/8	8/8
H	**1/8**	8/8	8/8
I	0/8	8/8	8/8
J	**3/8**	8/8	8/8
K	**4/8**	8/8	8/8
L	**7/8**	8/8	8/8
M	0/8	8/8	8/8
N	**5/8**	8/8	8/8
O	**1/8**	8/8	8/8
P	0/8	8/8	8/8
Q	0/8	8/8	8/8
R	**1/8**	8/8	8/8

Two Labs encountered some problems when running the analyses.

- **Lab. B**:

  Problems were encountered with the heater block: the registered temperature was not the correct one. The tube caps opened at each heat treatment tests... Unfortunately, they succeeded to program correctly the heater block some days later. The results are presented, but were not used in the interpretation.

- **Lab. G**:

  They did not have time to run some training before the day of analyses. The first run was invalid. They phoned to ADRIA to get some information.
  According to the discussion, and in a very short time, they run again the MDS reaction on the already available lysates. It was as well advised to proceed to a second lysis step before starting the MDS reaction, since some cross-reactions might have occurred. The second and the third assays are presented in the raw data table.
  According to the AFNOR Technical Committee, this Lab was not retained for the interpretation.

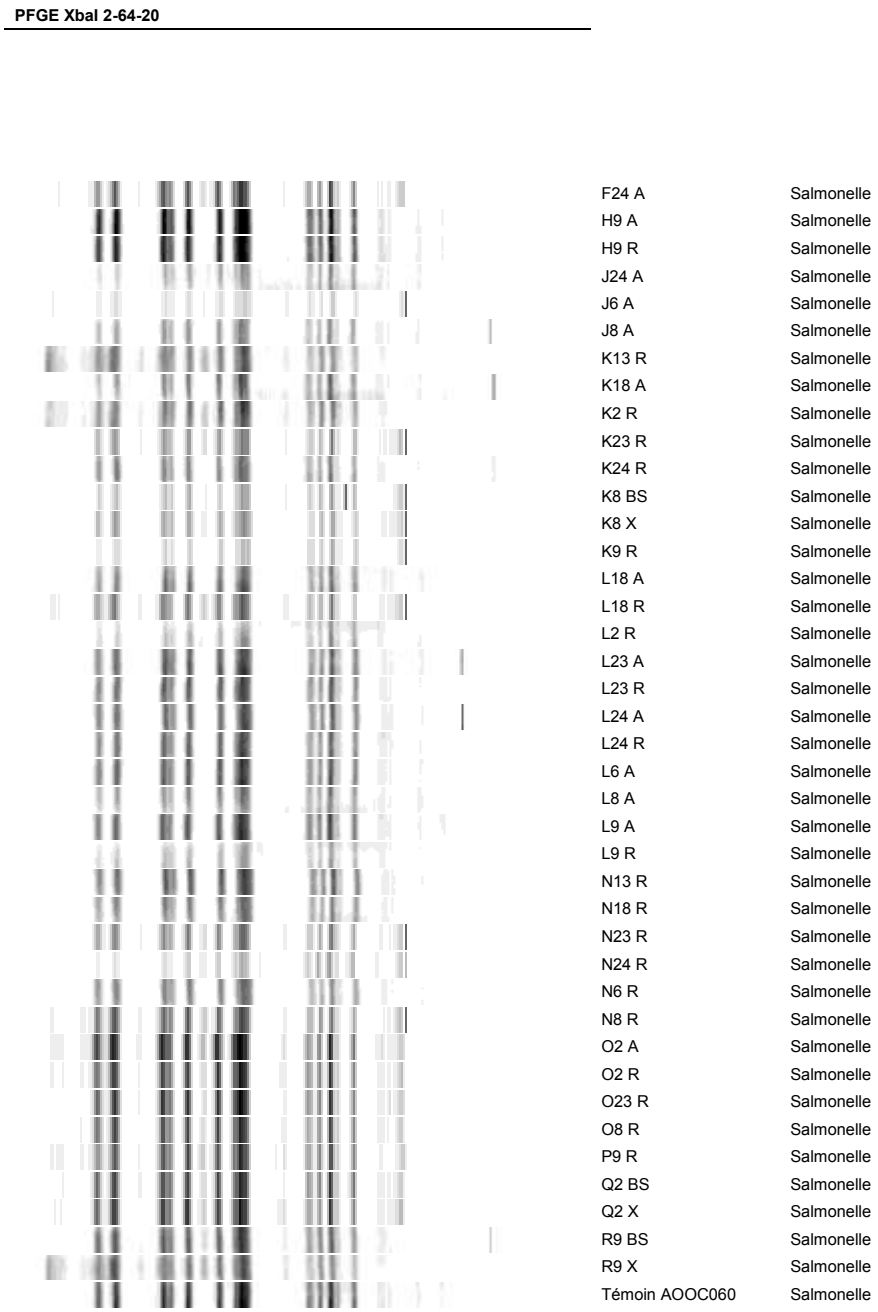
Salmonella isolates were recovered from blank samples in many cases. This may be due to cross contaminations, either in the reference method or in the alternative method. The phenomenon is particularly for 3 Labs (K, L and N).
The isolates from the blank samples were analysed by running molecular fingerprinting (PFGE) in order to confirm or infirm the hypothesis of cross-contaminations; the results are presented below (See figure 3).

Fingerpints were done according to the protocol described by PulseNet Network using Pulsed Field Gel Electrophoresis and *Xba*I as restriction enzyme:

Restriction enzyme	*Xba*I / 20U
Time and temperature	6 h at 37°C
Initial pulse (s)	2
Final pulse (s)	64
Run time (h)	20
Cooling module temperature (°C)	
Voltage (V)	200
Voltage (V/cm	6
Included angle (°)	120

Quality controls include the characterization of two strains.
The patterns were compared using the Dice band based coefficient. The observed and unique cluster was generated with the UPGMA (Unweighed Pair Group Method with Arithmetic Average) algorithm.

Figure 3 - Fingerprints



No difference can be seen between the patterns of all strains tested including the strain used for inoculation. The *Salmonella* recovered from non inoculated samples are probably due to cross contamination.

3.2.4 Results interpretation

15 Labs were retained for the results interpretation: A, C, E, F, H, I, J, K, L, M, N, O, P, Q and R.

3.2.4.1 *Specificity and sensitivity for each method*

For the L0 level and for each method, specificity percentages are calculated according to:

$$SP = \left[1 - \left(\frac{FP}{N-}\right) x\, 100\%\right]$$

with :N- = total number of all L0 assays
FP = number of false positive results

For each contamination level and each method, the sensitivity percentages are calculated according to:

$$SE = \frac{TP}{N+} x\, 100\%$$

with :N+ = total number of all L1 or L2 assays
TP = number of true positive results

Results (See ***Appendix 8***) are reported in Table 21.

Table 23 – Interpretation

Level	Reference method		Alternative method	
	SP/SE %	LCL%	SP/SE %	LCL%
Lo(SP)	78.3	70.8	79.2	71.8
L1(SE)	100.0	98	100.0	98
L2(SE)	99.2	96	100.0	98
L1+L2(SE)	99.6	96	100.0	98

LCL: confidence interval

3.2.4.2 Relative accuracy (AC)

Results for all levels (See ***Appendix 9***) are given below:

Table 24 - Paired results of the alternative and reference methods

Alternative method	Reference method		Total
	+	-	
+	PA = 253	PD = 12	265
-	ND = 12 (PPND = 3)	NA = 83 (PPNA = 8)	95
Total	N+ = 265	N- = 95	N =360

The observed PD and ND are probably due to cross contaminations during the usual culture and sub-culture steps, while the observed PPND and PPNA are probably due to cross-contaminations in the molecular assays.

Relative accuracy (AC) (in %) is calculated according to: $AC = \frac{(PA + NA)}{N} x\, 100\%$

with : N = number of samples analysed
PA = number of positive agreement
NA = number of negative agreement

The alternative method accuracy values with regard to the reference method are:

Table 25 – Interpretation

Level	AC %	LCL %
L0	80.8	73.6
L1	100.0	98.0
L2	99.2	96.0
L1 + L2	99.6	96.0
Total	**93.3**	**88.0**

3.2.4.3 Discordant results

$Y = PD + ND = 12 + 12 = 24$

$Y > 22$

$x^2 = d^2/Y = |12 - 12|^2 / 24 = 0/24 = 0$

$x^2 < 3.841$

The two methods are not different at $\alpha < 0.05$.

3.2.5 Interpretation

3.2.5.1 Comparison of the relative accuracy, specificity and sensibility values

The values obtained for the two parts of the validation study (comparative and inter-laboratory studies) are reported in Table 24.

Table 26 - Alternative method values calculated during the comparative and inter-laboratory studies

	Inter-laboratory study	Method comparison study
Relative accuracy (AC)	93.3	92.0
Sensitivity (SE)	100.0	91.6
Specificity (SP)	79.2	92.2

3.2.5.2 Accordance (DA)

Accordance values for both methods (See **Appendix 10** for the raw data) are the following:

Table 27 – Interpretation

Level	Reference method (DA)	Alternative method (DA)
L0	90.9 %	80.0 %
L1	100.0 %	100.0 %
L2	97.8 %	100.0 %

3.2.5.3 Concordance

Both methods concordance values (See **Appendix 11** for the raw data) are the following:

Table 28 – Interpretation

Level	Reference method	Alternative method
L0	67.6 %	65.0 %
L1	100.0 %	100.0 %
L2	97.9 %	100.0 %

3.2.5.4 Odds Ratio (COR)

The odds ratio value is determined according to:

$$COR = \frac{Accordance\ x\ (100 - condorcance)}{Concordance\ x\ (100 - accordance)}$$

Both method odds ratio values are:

Table 29 – Interpretation

Level	Reference method (COR)	Alternative method (COR)
L0	4.82	2.15
L1	1.00	1.00
L2	0.94	1.00

3.3 Conclusion

The **methods comparative study conclusions** are:

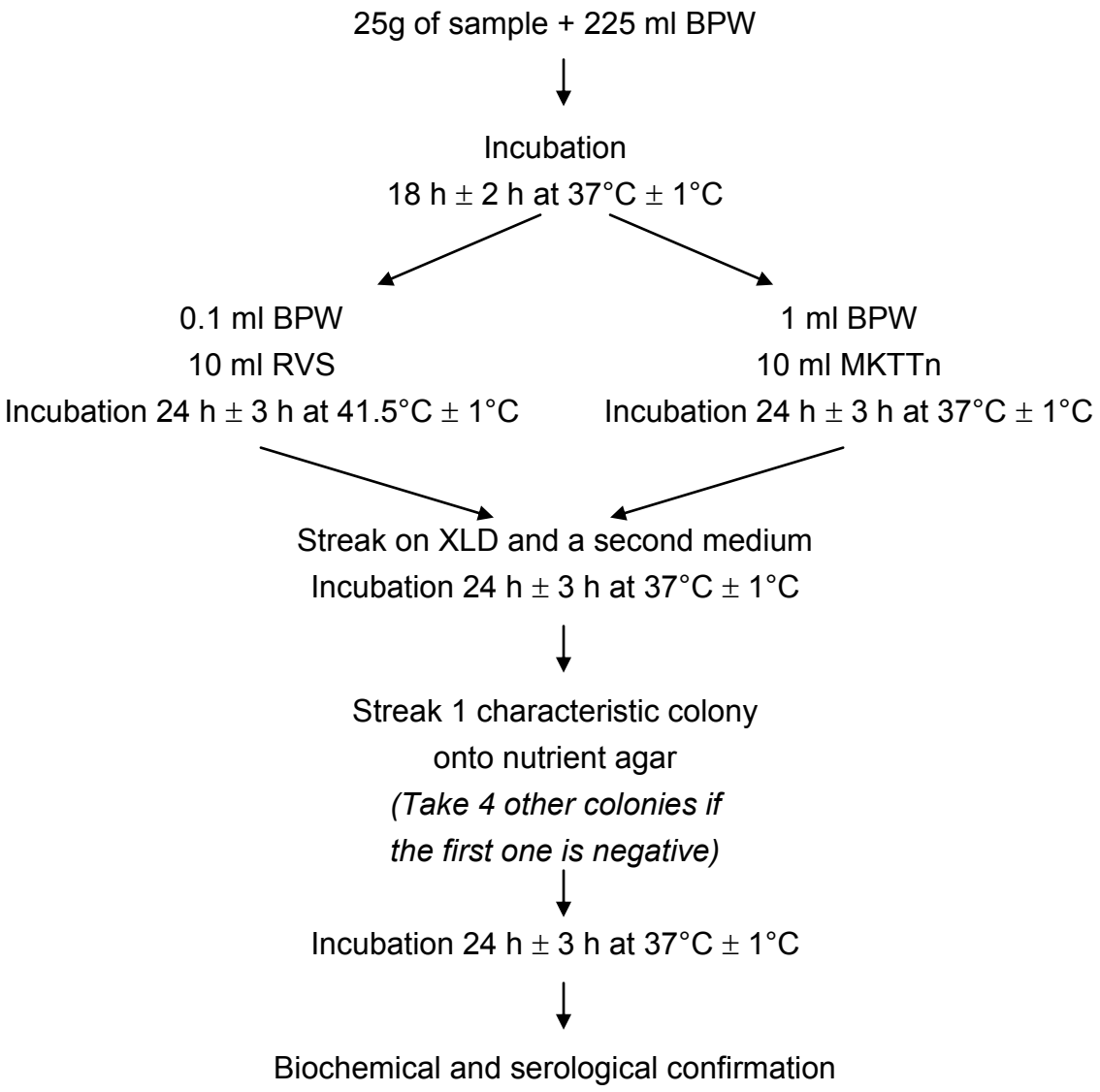
- ☒ **The 3M Molecular Detection Assay *Salmonella* shows satisfying relative accuracy, specificity and sensitivity.**
- ☒ **The relative detection limits of the alternative method and the ISO standard are similar.**
- ☒ **The 3M Molecular Detection Assay *Salmonella* shows clearly satisfying inclusivity and exclusivity results.**
- ☒ **Negative results are available within one day using the 3M Molecular Detection Assay *Salmonella***

The **inter-laboratory study conclusions** are:

- ☒ ***Salmonella*** **isolates were recovered in several blank samples, with both the reference and the alternative method This is probably due to cross-contaminations in the usual culture and sub-culture steps in many cases, or during the molecular assays. The molecular fingerprinting, showed no difference in the profile of 40 strains isolated from blank samples and the strain used to inoculate the other samples.**

- ☒ **The interpretations of the data were done by excluding two labs results, as agreed with the AFNOR Certification Technical Committee. The observed data and results confirmed that the alternative method and reference method show equivalent performances (accordance, concordance, odds ratio).**

Appendix 1 – NF EN ISO 6579: 2002: Microbiology of food and animal feeding stuffs – Horizontal method for the detection of *Salmonella* spp.



Appendix 2 – Flow diagram of the alternative method

Protocol 1: **Processed food products, excluding egg powders**

Protocol 2: **Raw, unprocessed frozen products and egg powders**
(protocol applied for the ring trial)

25 g or 1 sponge (or wipe) + 225 mL 3M BPW ISO

↓

Incubation for 18-24 hr at 37°C ±1° in non pre-warmed BPW (Protocol 1)
Or
Incubation for 18-24 hr at 41.5°C ±1°C in pre-warmed BPW (Protocol 2)

↓

Transfer 20 µL of each enrichment in Lysis solution tube

↓

Transfer 20 µL of NC in an individual Lysis solution tube

↓

Extraction

↓

- Transfer 20 µL of lysed sample to ***Salmonella* Reagent tube**
- Transfer 20 µL of **lysed NC** sample to ***Salmonella* Reagent tube**
- Transfer 20 µL of **lysed NC** sample to **Reagent Control tube**

↓

Automated Amplification and Detection

↓

Confirmation
- Option1: by the protocol described in the reference method
- Option 2: subculture in RVS broth and streaking onto selective agar and latex test[2]

[2] During the validation, biochemical tests were also applied on the latex positive colonies.

Milk Powders

Infant formula with probiotic

Reference method

1/10 dilution

25 g + 225 ml BPW buffer 2X
↓
Stomaching
↓
37°C ± 1°C, 16 h – 20 h
↓

1 ml / MKTTn	0.1ml / RVS
↓	↓
37°C / 24h ± 3h	41.5°C / 24 h ± 3h
↓	↓

Streaking on XLD and ASAP
↓
Confirmatory tests

Alternative method

1/10 dilution

25 g + 225 ml non pre-warmed BPW 3M
↓
Stomaching
↓
37°C ± 1°C, 20 h- 26 h

Lysis 20 µl	0.1ml / RVS
↓	↓
MDS test on 20 µl	41.5°C / 24h ± 3 h
	↓
	Streaking on XLD and ASAP
	↓
	Test Latex OXOID on typical colony / ISO tests

Other products (Infant formula, Hypoallergenic, Milk powder)

Reference & Alternative methods

1/10 dilution

25g + 225 ml non pre-warmed BPW 3M
↓
Stomaching
↓
37°C ± 1°C, 20 h - 26 h
↓

1ml / MKTTn	0.1ml / RVS	Lysis 20 µl
↓	↓	↓
37°C / 24 h ± 3 h	41.5°C / 24 h ± 3 h	MDS test on 20 µl
↓	↓	

Streaking on XLD and ASAP
↓
Confirmatory tests

Cocoa based products (>20% cocoa)

Reference method	Alternative method
1/10 dilution 25 g + 225 ml BPW with non fat milk (100g/L) with Brilliant green 0.018 g/l at T2 hours ↓ Stomaching ↓ 37°C ± 1°C, 16 h – 20 h ↓ 1 ml / MKTTn ↓ 37°C / 24 h ± 3 h ↓ 0.1 ml / RVS ↓ 41.5°C / 24 h ± 3h ↓ Streaking on XLD and ASAP ↓ Confirmatory tests	**1/10 dilution** 25 g + 225 ml non pre-warmed UHT <u>non</u> fat milk with Brilliant green 1% aqueous (+450µl) at T0 ↓ Stomaching ↓ 37°C ± 1°C, 24 h - 30 h ↓ Lysis 20 µl ↓ MDS test on 20 µl ↓ 0.1 ml / RVS ↓ 41.5°C / 24 h ± 3 h ↓ Streaking on XLD and ASAP ↓ Test Latex OXOID on typical colony / ISO tests

Spices and aromatic herbs

Reference method	Alternative method
1/10 dilution	**1/20 dilution**
25 g + 225 ml BPW with 0.5% K2SO3 ↓ Stomaching ↓ 37°C ± 1°C 16 h – 20 h ↓ 1 ml / MKTTn ↓ 37°C / 24 h ± 3 h ↓ 0.1 ml / RVS ↓ 41.5°C / 24h ± 3 h ↓ Streaking on XLD and ASAP ↓ Confirmatory tests	25 g + 475 ml <u>non</u> pre-warmed BPW 3M with 0.5% K2SO3 ↓ Stomaching ↓ 37°C ± 1°C, 18 h - 24 h ↓ Lysis 10 µl ↓ MDS test on 20 µl ↓ 0.1 ml / RVS ↓ 41.5°C / 24h ± 3 h ↓ Streaking on XLD and ASAP ↓ Test Latex OXOID on typical colony / ISO tests

Concentrates / Culinary products / Tea / Coffee

Concentrates / Culinary products

Reference method

1/10 dilution

25 g + 225 ml BPW
↓
Stomaching
↓
37°C ± 1°C, 16 h – 20 h
↓

1 ml / MKTTn	0.1 ml / RVS
↓	↓
37°C / 24h ± 3 h	41.5°C / 24 h ± 3h
↓	↓

Streaking on XLD and ASAP
↓
Confirmatory tests

Alternative method

1/20 dilution

25 g + 475 ml <u>non</u> pre-warmed BPW 3M
↓
Stomaching
↓
37°C ± 1°C, 18 h - 24 h
↓

Lysis 10 µl	0.1 ml / RVS
↓	↓
MDS test on 20 µl	41.5°C / 24 h ± 3 h
	↓
	Streaking on XLD and ASAP
	↓
	Test Latex OXOID on typical colony / ISO tests

Tea / Coffee (= inhibitor products)

Reference method

1/10 dilution

25 g + 225 ml BPW with 0.5% K2SO3
↓
Stomaching
↓
37°C ± 1°C, 16 h – 20 h
↓

1 ml / MKTTn	0.1 ml / RVS
↓	↓
37°C / 24 h ± 3 h	41.5°C / 24 h ± 3 h
↓	↓

Streaking on XLD and ASAP
↓
Confirmatory tests

Alternative method

1/20 dilution

25g + 475 ml <u>non</u> pre-warmed BPW 3M
↓
Stomaching
↓
37°C ± 1°C, 18h - 24h
↓

Lysis 10 µl	0.1 ml / RVS
↓	↓
MDS test on 20 µl	41.5°C / 24 h ± 3 h
	↓
	Streaking on XLD and ASAP
	↓
	Test Latex OXOID on typical colony / ISO tests

Appendix 3 – Artificial contamination of samples

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
3760	**Pasteurised half skimmed milk**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 10 min	2.19	2-1-0-4-2 (1.8)	+
4129	**Nougat ice cream**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 10 min	4.90	3-4-5-3-1(3.2)	-
4130	**Dairy based dessert (semolina pudding)**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 10 min	4.90	3-4-5-3-1(3.2)	+
4131	**Dairy based dessert (rice pudding)**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 10 min	4.90	3-4-5-3-1(3.2)	-
4132	**Dairy based dessert (Tiramisu)**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 10 min	4.90	3-4-5-3-1(3.2)	-
4972	**Chocolate bar (70% cocoa)**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 8mn	0.93	3-11-6-10-9 (7.8)	+
5126	**Chocolate bar (70% cocoa)**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 8mn	1.33	3-2-2-2-5(3.6)	+
5496	**Chocolate (40,9% cocoa)**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 8mn	1.23	11-7-7-10-9 (8.8)	+
5500	**Chocolate powder (100% cocoa)**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 8mn	1.23	11-7-7-10-9 (8.8)	+
5508	**Cocoa based product (24% cocoa)**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 8mn	1.23	11-7-7-10-9 (8.8)	+
5512	**Cocoa based product (21% cocoa)**	Salmonella Agona Ad1483	Tiramisu	HT 56°C 8mn	1.23	11-7-7-10-9 (8.8)	+
434	**Instant coffee**	Salmonella Agona Ad1725	Cereals	Lyophilisation	0.14	4-10-10-10-10(8.8)	-
432	**Instant coffee**	Salmonella Agona Ad1725	Infant cereals	Lyophilisation	0.14	4-10-10-10-10(8.8)	+
4981	**Spices for tagine**	Salmonella Agona Ad1725	Infant cereals	HT 8 min 56°C	1.43	16-15-19-15-21 (17.2)	-
5133	**Raz El Hanout**	Salmonella Agona Ad1725	Infant cereals	HT 8 min 56°C	1.78	11-16-14-12-17(14.0)	-
102	**Garlic**	Salmonella Agona Ad1725	Infant cereals	HT 5 min 56°C	0.8	22-14-17-18-9(16.0)	+
439	**Dehydrated sliced shallots**	Salmonella Agona Ad1725	Infant cereals	Lyophilisation	0.14	4-10-10-10-10(8.8)	+
440	**Dehydrated shallots**	Salmonella Agona Ad1725	Infant cereals	Lyophilisation	0.14	4-10-10-10-10(8.8)	+
442	**Thyme**	Salmonella Agona Ad1725	Infant cereals	Lyophilisation	0.14	4-10-10-10-10(8.8)	-
443	**Dehydrated basil leaves**	Salmonella Agona Ad1725	Infant cereals	Lyophilisation	0.14	4-10-10-10-10(8.8)	+
4198	**Culinary product (poultry)**	Salmonella Agona Ad1725	Infant cereals	HT 8 min 56°C	1.10	6-0-2-3-3(2.8)	-
4202	**Instant infusion**	Salmonella Agona Ad1725	Infant cereals	HT 8 min 56°C	1.10	6-0-2-3-3(2.8)	-
5093	**Milk powder**	Salmonella Anatum Ad1166	Dairy product	HT 8 min 56°C	0.78	5-6-5-9-5 (6.0)	+
5100	**Half skimmed milk powder**	Salmonella Anatum Ad1166	Dairy product	HT 8 min 56°C	0.78	5-6-5-9-5 (6.0)	+

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
5107	**Hypoallergenic infant formula milk powder**	Salmonella Anatum Ad1166	Dairy product	HT 8 min 56°C	0.78	5-6-5-9-5 (6.0)	+
3771	**Faisselle**	Salmonella Anatum Ad1168	Dairy product	7 days 4°C	0.54	5-6-4-6-5 (5.2)	+
3772	**Fermented cheese**	Salmonella Anatum Ad1168	Dairy product	7 days 4°C	0.54	5-6-4-6-5 (5.2)	+
3773	**Faisselle**	Salmonella Anatum Ad1168	Dairy product	7 days 4°C	0.54	5-6-4-6-5 (5.2)	+
2868	**Fresh salmon**	Salmonella Anatum Ad1451	Fish fillet	4°C -3 months	1.33	8-5-1-7-12(6.6)	+
2869	**Whiting fillet**	Salmonella Anatum Ad1451	Fish fillet	4°C -3 months	1.33	8-5-1-7-12(6.6)	+
2870	**Sandwich(tuna, vegetables)**	Salmonella Anatum Ad1451	Fish fillet	4°C -3 months	1.33	8-5-1-7-12(6.6)	+
2871	**Sandwich(salmon, vegetables)**	Salmonella Anatum Ad1451	Fish fillet	4°C -3 months	1.33	8-5-1-7-12(6.6)	+
2872	**Sandwich(salmon)**	Salmonella Anatum Ad1451	Fish fillet	4°C -3 months	1.33	8-5-1-7-12(6.6)	+
5691	**Infant formula milk powder with probiotics Bifidobacterium, lactic ferment**	Salmonella Anatum Ad298	Milk powder	HT 8 min 56°C	1.66	18-19-13-15-13(15.6)	+
25	**Cocoa mass**	Salmonella Bareilly Ad1687	Chocolate industry	HT 56°C 8mn	1.70	3-10-12-7-6 (7.6)	+
28	**Cocoa butter**	Salmonella Bareilly Ad1687	Chocolate industry	HT 56°C 8mn	1.70	3-10-12-7-6 (7.6)	+
5432	**Process water**	Salmonella Bovismorbificans	Environmental sample	HT 8 min 56°C	0.79	1-4-4-2-4(3.0)	+
5433	**Process water**	Salmonella Bovismorbificans	Environmental sample	HT 8 min 56°C	0.79	1-4-4-2-4(3.0)	+
5435	**Process water**	Salmonella Bovismorbificans	Environmental sample	HT 8 min 56°C	0.79	1-4-4-2-4(3.0)	+
5436	**Process water**	Salmonella Bovismorbificans	Environmental sample	HT 8 min 56°C	0.79	1-4-4-2-4(3.0)	+
4970	**Chocolate bar (52% cocoa)**	Salmonella Bovismorbificans 728	Gelatin	HT 56°C 8mn	0.79	2-1-3-6-5 (3.4)	+
4974	**Chocolate powder (47% cocoa)**	Salmonella Bovismorbificans 728	Gelatin	HT 56°C 8mn	0.79	2-1-3-6-5 (3.4)	+
4978	**Chocolate powder (100% cocoa)**	Salmonella Bovismorbificans 728	Gelatin	HT 56°C 8mn	0.79	2-1-3-6-5 (3.4)	+
5127	**Chocolate powder (32% cocoa)**	Salmonella Bovismorbificans 728	Gelatin	HT 56°C 8mn	1.03	11-8-9-11-13(10.4)	+
5287	**Wipe**	Salmonella Bovismorbificans 9	Environmental sample	6 days 4°C	0.42	0-1-0-1-1(0.6)	+
5288	**Wipe**	Salmonella Bovismorbificans 9	Environmental sample	6 days 4°C	0.42	0-1-0-1-1(0.6)	+
2853	**Deli salad(pine apple, surimi)**	Salmonella Braendenburg Ad351	Seafood cocktail	4°C -3 months	1.37	5-2-7-4-7(5.0)	+
2854	**Pasta with surimi**	Salmonella Braendenburg Ad351	Seafood cocktail	4°C -3 months	1.37	5-2-7-4-7(5.0)	+
2865	**Shrimps**	Salmonella Braendenburg Ad351	Seafood cocktail	4°C -3 months	1.37	5-2-7-4-7(5.0)	+
2866	**Crayfish**	Salmonella Braendenburg Ad351	Seafood cocktail	4°C -3 months	1.37	5-2-7-4-7(5.0)	+

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
2867	**Prawns**	Salmonella Braendenburg Ad351	Seafood cocktail	4°C -3 months	1.37	5-2-7-4-7(5.0)	+
5128	**Cocoa powder (100% cocoa)**	Salmonella Braenderup Ad1661	Chocolate industry	HT 56°C 8mn	1.89	2-2-3-2-2(2.2)	+
5495	**Chocolate bar (60% cocoa)**	Salmonella Braenderup Ad1661	Chocolate industry	HT 56°C 8mn	2.51	5-2-8-0-2 (3.4)	-
5499	**Chocolate powder (100% cocoa)**	Salmonella Braenderup Ad1661	Chocolate industry	HT 56°C 8mn	2.51	5-2-8-0-2 (3.4)	-
5503	**Cocoa based product (32% cocoa)**	Salmonella Braenderup Ad1661	Chocolate industry	HT 56°C 8mn	2.51	5-2-8-0-2 (3.4)	-
734	**Concentrate (lamb)**	Salmonella Deby 18	Merguez	HT 56°C 8min	1.31	0-0-0-0-0(0.0)	-
792	**Concentrate (lamb)**	Salmonella Deby 18	Merguez	HT 56°C 8min	1.31	0-2-1-3-0 (0.8)	-
5692	**Culinary product (fish)**	Salmonella Derby Ad1093	Fish fillet	HT 8 min 56°C	1.18	4-4-5-1-6(4.0)	-
5703	**Culinary product (vegetables)**	Salmonella Derby Ad1093	Fish fillet	HT 8 min 56°C	1.18	4-4-5-1-6(4.0)	-
5706	**Culinary product (fish)**	Salmonella Derby Ad1093	Fish fillet	HT 8 min 56°C	1.18	4-4-5-1-6(4.0)	-
14	**Instant tee**	Salmonella Derby Ad1545	Water	HT 5 min 56°C	0.58	11-12-9-7-8 (9.4)	-
524	**Concentrate (garlic)**	Salmonella Derby Ad1545	Water	HT 8 min 56°C /30 days 4°C	1.2	23-28-17-19-26 (22.6)	+
525	**Concentrate (carrots)**	Salmonella Derby Ad1545	Water	HT 8 min 56°C /30 days 4°C	1.2	23-28-17-19-26 (22.6)	+
732	**Concentrate (lobster)**	Salmonella Derby F81	Mussels	HT 56°C 8min	1.88	2-2-1-4-1 (2.0)	-
795	**Concentrate (lobster)**	Salmonella Derby F81	Mussels	HT 56°C 8min	1.88	12-13-12-16-21 (14.8)	+
798	**Culinary product (fish)**	Salmonella Derby F81	Mussels	HT 56°C 8min	1.88	12-13-12-16-21 (14.8)	+
2858	**Raw milk cheese**	Salmonella diarizonae Ad453	Raw ewe milk cheese	pH4 -3 months	1.33	4-6-10-4-5(5.8)	+
2859	**Raw milk cheese**	Salmonella diarizonae Ad453	Raw ewe milk cheese	pH4 -3 months	1.33	4-6-10-4-5(5.8)	+
2862	**Fermented milk**	Salmonella diarizonae Ad453	Raw ewe milk cheese	pH4 -3 months	1.33	4-6-10-4-5(5.8)	+
2863	**Fermented milk**	Salmonella diarizonae Ad453	Raw ewe milk cheese	pH4 -3 months	1.33	4-6-10-4-5(5.8)	+
2864	**Fermented milk**	Salmonella diarizonae Ad453	Raw ewe milk cheese	pH4 -3 months	1.33	4-6-10-4-5(5.8)	+
4390	**Pasteurised milk cheese**	Salmonella diarizonae Ad595	Raw milk cheese	4°C -45 days	0.35	9-7-8-9-13(9.2)	+
4391	**Pasteurised milk cheese**	Salmonella diarizonae Ad595	Raw milk cheese	4°C -45 days	0.35	9-7-8-9-13(9.2)	+
4499	**Raw milk cheese**	Salmonella diarizonae Ad595	Raw milk cheese	4°C -45 days	0.35	7-15-10-11(10.8)	+
5650	**Dusts**	Salmonella Dublin Ad1336	Raw milk cheese	11 days 4°C	0.75	5-10-8-5-6 (6.8)	+
5651	**Dusts**	Salmonella Dublin Ad1336	Raw milk cheese	11 days 4°C	0.75	5-10-8-5-6 (6.8)	+

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
5652	**Dusts**	Salmonella Dublin Ad1336	Raw milk cheese	11 days 4°C	0.75	5-10-8-5-6 (6.8)	+
5653	**Dusts**	Salmonella Dublin Ad1336	Raw milk cheese	11 days 4°C	0.75	5-10-8-5-6 (6.8)	+
3836	**Raw milk cheese**	Salmonella Dublin Ad531	Raw milk cheese	14 days TS10% NaCl 4°C	0.38	7-6-6-2-6 (5.4)	+
3837	**Raw milk cheese**	Salmonella Dublin Ad531	Raw milk cheese	14 days TS10% NaCl 4°C	0.38	7-6-6-2-6 (5.4)	+
5092	**Skimmed milk powder**	Salmonella Dublin Ad531	Raw milk cheese	HT 8 min 56°C	0.98	9-5-7-18-6 (9.0)	+
5099	**Skimmed milk powder**	Salmonella Dublin Ad531	Raw milk cheese	HT 8 min 56°C	0.98	9-5-7-18-6 (9.0)	+
5106	**Hypoallergenic infant formula milk powder**	Salmonella Dublin Ad531	Raw milk cheese	HT 8 min 56°C	0.98	9-5-7-18-6 (9.0)	+
5113	**Infant formula milk powder with probiotics**	Salmonella Dublin Ad531	Raw milk cheese	HT 8 min 56°C	0.98	9-5-7-18-6 (9.0)	+
5097	**Milk powder**	Salmonella Duisburg Ad1812	Raw ewe milk	HT 8 min 56°C	0.55	3-7-11-14-10 (9.0)	+
5104	**Hypoallergenic infant formula milk powder**	Salmonella Duisburg Ad1812	Raw ewe milk	HT 8 min 56°C	0.55	3-7-11-14-10 (9.0)	+
5111	**Infant formula milk powder with probiotics Lactobacillus rhamnosus - Bifidobacterium infantis (2,2.10^6/g)**	Salmonella Duisburg Ad1812	Raw ewe milk	HT 8 min 56°C	0.55	3-7-11-14-10 (9.0)	+
3868	**Egg yolk powder**	Salmonella Enteritidis 10	Egg powder	HT 56°C 10 min	0.93	1-4-2-4-1 (2.4)	+
3212	**Pasteurized white egg product**	Salmonella Enteritidis 23	Raw whole egg product	4°C -2months	0.75	4-6-1-2-6(3.8)	+
3213	**Pasteurized white egg product**	Salmonella Enteritidis 23	Raw whole egg product	4°C -2months	0.75	4-6-1-2-6(3.8)	+
3214	**Pasteurized egg yolk product**	Salmonella Enteritidis 23	Raw whole egg product	4°C -2months	0.75	4-6-1-2-6(3.8)	-
3217	**Fresh english cream**	Salmonella Enteritidis 23	Raw whole egg product	4°C -2months	0.75	4-6-1-2-6(3.8)	+
3218	**English cream**	Salmonella Enteritidis 23	Raw whole egg product	4°C -2months	0.75	4-6-1-2-6(3.8)	+
3884	**Deli salad(cheese,ham, vegetables)**	Salmonella Enteritidis 2532	Ham	HT 56°C 10 min	1.26	2-4-2-3-0 (2.2)	+
3857	**Raw whole egg product**	Salmonella Enteritidis 465	Liquid egg	41 days 4°C	0.30	5-3-3-8-5 (4.8)	+
3222	**Mayonnaise**	Salmonella Enteritidis 657	Whole egg product	pH 4 -3 months	0.88	6-5-8-1-5(5.0)	+
3223	**Mayonnaise with lemon**	Salmonella Enteritidis 657	Whole egg product	pH 4 -3 months	0.88	6-5-8-1-5(5.0)	+
3516	**Salmon and scallops gratin**	Salmonella Hadar F106	Mussels	HT 56°C 10 min	1.62	2-1-0-3-0(1.2)	+
3517	**Cod pie**	Salmonella Hadar F106	Mussels	HT 56°C 10 min	1.62	2-1-0-3-0(1.2)	+

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
2958	Egg yolk powder	Salmonella Havana Ad1728	Raw whole egg product	HT 56°C 10 min	1.64	3-3(3.0)	+
2959	White egg powder	Salmonella Havana Ad1728	Raw whole egg product	HT 56°C 10 min	1.64	3-3(3.0)	+
2960	Whole egg powder	Salmonella Havana Ad1728	Raw whole egg product	HT 56°C 10 min	1.64	3-3(3.0)	+
2963	White egg powder	Salmonella Havana Ad1728	Raw whole egg product	HT 56°C 10 min	1.64	3-3(3.0)	+
2964	Whole egg powder	Salmonella Havana Ad1728	Raw whole egg product	HT 56°C 10 min	1.64	3-3(3.0)	-
5695	Culinary product (poultry)	Salmonella Havana Ad930	Hen	HT 8 min 56°C	0.94	6-9-8-10-12(9.0)	+
5696	Culinary product (beef)	Salmonella Havana Ad930	Hen	HT 8 min 56°C	0.94	6-9-8-10-12(9.0)	+
5704	Culinary product (beef)	Salmonella Havana Ad930	Hen	HT 8 min 56°C	0.94	6-9-8-10-12(9.0)	-
5625	Wipe	Salmonella Heidelberg A00E005	Dusts	21 days 4°C	1.19	5-0-6-10-4(5.0)	+
5626	Wipe	Salmonella Heidelberg A00E005	Dusts	21 days 4°C	1.19	5-0-6-10-4(5.0)	+
5632	Dusts	Salmonella Heidelberg A00E005	Dusts	21 days 4°C	1.19	5-0-6-10-4(5.0)	+
5633	Dusts	Salmonella Heidelberg A00E005	Dusts	21 days 4°C	1.19	5-0-6-10-4(5.0)	+
5634	Dusts	Salmonella Heidelberg A00E005	Dusts	21 days 4°C	1.19	5-0-6-10-4(5.0)	-
3746	Pasta with chicken and mushroom	Salmonella Heidelberg F33	Chicken gizzard	HT 56°C 10 min	1.44	4-2-1-2-1 (2.0)	+
3748	Cooked beef meat	Salmonella Heidelberg F33	Chicken gizzard	HT 56°C 10 min	1.44	4-2-1-2-1 (2.0)	+
3749	Cooked chicken meat	Salmonella Heidelberg F33	Chicken gizzard	HT 56°C 10 min	1.44	4-2-1-2-1 (2.0)	+
3750	Chili con carne	Salmonella Heidelberg F33	Chicken gizzard	HT 56°C 10 min	1.44	4-2-1-2-1 (2.0)	+
3747	Cooked sandwich ham/cheese	Salmonella Heidelberg F33	Chicken gizzard	HT 56°C 10 min	1.44	4-2-1-2-1 (2.0)	+
3756	Fish pie	Salmonella Houtanae Ad597	Cooked cod	HT 56°C 10 min	1.81	2-2-2-1-2 (1.8)	+
731	Concentrate (lobster)	Salmonella Indiana 2	Fish flour	HT 56°C 8min	1.35	2-2-3-3-4 (2.8)	-
793	Concentrate (lobster)	Salmonella Indiana 2	Fish flour	HT 56°C 8min	1.35	10-8-9-15-15 (11.4)	-
794	Concentrate (fish))	Salmonella Indiana 2	Fish flour	HT 56°C 8min	1.35	10-8-9-15-15 (11.4)	+
2873	Raw milk	Salmonella Indiana Ad174	White cheese	4°C -3 months	1.11	2-1-5-7-6(4.2)	+
2874	Raw milk	Salmonella Indiana Ad174	White cheese	4°C -3 months	1.11	2-1-5-7-6(4.2)	+
2875	Raw milk	Salmonella Indiana Ad174	White cheese	4°C -3 months	1.11	2-1-5-7-6(4.2)	+
3759	Pasteurised milk	Salmonella Indiana Ad174	White cheese	HT 56°C 10 min	2.54	0-0-1-2-0 (0.6)	-
4123	Dairy based dessert(semolina pudding)	Salmonella Indiana Ad174	White cheese	HT 56°C 10 min	2.55	1-3-2-1-2(1.8)	-

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
4124	**Dairy based dessert(rice pudding)**	Salmonella Indiana Ad174	White cheese	HT 56°C 10 min	2.55	1-3-2-1-2(1.8)	-
4125	**Dairy based dessert(Tiramisu)**	Salmonella Indiana Ad174	White cheese	HT 56°C 10 min	2.55	1-3-2-1-2(1.8)	-
4126	**Dairy based dessert(semolina pudding)**	Salmonella Indiana Ad174	White cheese	HT 56°C 10 min	2.55	1-3-2-1-2(1.8)	+
5397	**Skimmed milk powder**	Salmonella Indiana Ad174	White cheese	HT 8 min 56°C	1.13	5-6-4-7-7 (5.8)	+
5400	**Half skimmed milk powder**	Salmonella Indiana Ad174	White cheese	HT 8 min 56°C	1.13	5-6-4-7-7 (5.8)	+
5690	**Infant formula milk powder with probiotics Salmonella thermophilus (0,034%), B. longum**	Salmonella Indiana Ad174	White cheese	HT 8 min 56°C	1.03	16-16-17-21-21(18.2)	+
5139	**Culinary product (veal)**	Salmonella Infantis 12	Terrine	HT 8 min 56°C	1.56	3-3-2-3-3(2.8)	+
5142	**Culinary product (beef)**	Salmonella Infantis 12	Terrine	HT 8 min 56°C	1.56	3-3-2-3-3(2.8)	-
672	**Culinary product (beef)**	Salmonella Infantis 128	Ground beef	4°C / 10 days	0.78	8-7-5-8-9 (7.4)	+
4121	**Ready to eat pork**	Salmonella Infantis 288	Raw pork meat	HT 56°C 10 min	2.80	5-8-5-10-9(7.4)	+
3769	**Pasteurized white cheese**	Salmonella Infantis 401B	Raw milk	7 days 4°C	0.65	4-4-2-3-4 (3.4)	+
3770	**Cream**	Salmonella Infantis 401B	Raw milk	7 days 4°C	0.65	4-4-2-3-4 (3.4)	+
5396	**Infant formula milk powder**	Salmonella Infantis 401B	Raw milk	HT 8 min 56°C	0.56	6-3-11-8-5 (6.6)	-
5399	**Half skimmed milk powder**	Salmonella Infantis 401B	Raw milk	HT 8 min 56°C	0.56	6-3-11-8-5 (6.6)	+
5689	**Infant formula milk powder with probiotics Lactobacillus rhamnosus, Bifidobacterium infantis**	Salmonella Infantis 401B	Raw milk	HT 8 min 56°C	0.71	16-13-12-14-20(15.0)	+
4865	**Dehydrated parsley**	Salmonella Infantis Ad1646	Compost	HT 8 min 56°C	1.89	2-5-7-7-9 (6.0)	-
4866	**Dehydrated herbs**	Salmonella Infantis Ad1646	Compost	HT 8 min 56°C	1.89	2-5-7-7-9 (6.0)	-
4877	**Ground cumin**	Salmonella Infantis Ad1646	Compost	HT 8 min 56°C	1.89	2-5-7-7-9 (6.0)	-
4880	**Ground coriander**	Salmonella Infantis Ad1646	Compost	HT 8 min 56°C	1.89	2-5-7-7-9 (6.0)	-
5131	**Dehydrated basil leaves**	Salmonella Infantis Ad1646	Compost	HT 8 min 56°C	0.66	36-35-54-42-48(43.0)	-
99	**Dehydrated sliced shallots**	Salmonella Infantis Ad1646	Compost	HT 5 min 56°C	0.7	20-16-22-26-22(21.2)	-
536	**Dehydrated parsley**	Salmonella Infantis Ad1646	Compost	Lyophilisation	0.23	0-2-9-0-0(2.2)	+
545	**Shallots**	Salmonella Infantis Ad1646	Compost	Lyophilisation	0.23	0-2-9-0-0(2.2)	+

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
546	**Garlic**	Salmonella Infantis Ad1646	Compost	Lyophilisation	0.23	0-2-9-0-0(2.2)	+
673	**Dehydrated oregano**	Salmonella Infantis Ad1646	Compost	Lyophilisate + product (contact 72h)	0.08	19-24-20-18-12 (16.6)	-
679	**Spices for chili**	Salmonella Infantis Ad1646	Compost	Lyophilisate + product (contact 72h)	0.85	13-8-18-12-18 (13.8)	+
19	**Instant coffee**	Salmonella Infantis Ad1646	Compost	HT 8 min 56°C	1.26	6-4-7-9-6 (6.4)	-
526	**Instant tee**	Salmonella Infantis Ad1646	Compost	Lyophilisation	0.23	0-2-9-0-0(2.2)	+
4976	**Cocoa powder (100% cocoa)**	Salmonella Infantis Ad1684	Chocolate mousse	HT 56°C 8mn	1.49	4-2-3-6-2 (3.4)	+
4973	**Chocolate bar (50% cocoa)**	Salmonella Infantis Ad1684	Chocolate mousse	HT 56°C 8mn	1.49	4-2-3-6-2 (3.4)	+
4977	**Cocoa powder (100% cocoa)**	Salmonella Infantis Ad1684	Chocolate mousse	HT 56°C 8mn	1.49	4-2-3-6-2 (3.4)	+
5622	**Process water**	Salmonella Kedougou Ad929	Environmental sample	21 days 4°C	1.07	3-6-3-5-10(5.4)	**+**
5623	**Process water**	Salmonella Kedougou Ad929	Environmental sample	21 days 4°C	1.07	3-6-3-5-10(5.4)	**+**
5624	**Process water**	Salmonella Kedougou Ad929	Environmental sample	21 days 4°C	1.07	3-6-3-5-10(5.4)	**-**
5629	**Wipe**	Salmonella Kedougou Ad929	Environmental sample	21 days 4°C	1.07	3-6-3-5-10(5.4)	**+**
5631	**Wipe**	Salmonella Kedougou Ad929	Environmental sample	21 days 4°C	1.07	3-6-3-5-10(5.4)	**+**
520	**Concentrate (beef)**	Salmonella Kedougou Ad929	Environmental sample (boeuf)	4°C / 49 days	0.79	15-17-12-14-18(15.2)	+
104	**Dehydrated fennel**	Salmonella Kentucky Ad1755	Water	HT 5 min 56°C	0.3	27-29-29-15-27(25.4)	-
539	**Mix of dehydrated aromatic herbs**	Salmonella Kentucky Ad1755	Water	Lyophilisation	0.09	13-18-13-13-14(14.2)	+
677	**Chive**	Salmonella Kentucky Ad1755	Water	Lyophilisate + product (contact 72h)	0.08	22-23-29-33-33 (28.0)	+
681	**Spices for tandori chicken**	Salmonella Kentucky Ad1755	Water	Lyophilisate + product (contact 72h)	0.37	18-20-21-22-22 (20.6)	-
529	**Instant coffee**	Salmonella Kentucky Ad1755	Water	Lyophilisation	0.09	13-18-13-13-14(14.2)	-
530	**Instant coffee**	Salmonella Kentucky Ad1755	Water	Lyophilisation	0.09	13-18-13-13-14(14.2)	+
668	**Instant coffee**	Salmonella Kentucky Ad1755	Water	Lyophilisation	0	25-15-26-21-25 (22.4)	+
670	**Instant tee**	Salmonella Kentucky Ad1755	Water	Lyophilisation	0	25-15-26-21-25 (22.4)	+
671	**Culinary product (fish)**	Salmonella Kentucky Ad1755	Water	Lyophilisation	0	25-15-26-21-25 (22.4)	+
5620	**Process water**	Salmonella Kottbus 1	Environmental sample	21 days 4°C	0.9	4-4-5-4-3(4.0)	**+**
5621	**Process water**	Salmonella Kottbus 1	Environmental sample	21 days 4°C	0.9	4-4-5-4-3(4.0)	**-**

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
5627	**Wipe**	Salmonella Kottbus 1	Environmental sample	21 days 4°C	0.9	4-4-5-4-3(4.0)	+
5628	**Wipe**	Salmonella Kottbus 1	Environmental sample	21 days 4°C	0.9	4-4-5-4-3(4.0)	+
5630	**Wipe**	Salmonella Kottbus 1	Environmental sample	21 days 4°C	0.9	4-4-5-4-3(4.0)	+
4118	**Pasteurised milk cheese**	Salmonella Livingstone Ad1169	Dairy product	HT 56°C 10 min	4.78	7-9-11-9-5(8.2)	-
4119	**Pasteurised milk cheese**	Salmonella Livingstone Ad1169	Dairy product	HT 56°C 10 min	4.78	7-9-11-9-5(8.2)	-
4120	**Ready to eat pork**	Salmonella Livingstone Ad1169	Dairy product	HT 56°C 10 min	4.78	7-9-11-9-5(8.2)	-
4127	**Vanilla ice cream**	Salmonella Livingstone Ad1169	Dairy product	HT 56°C 10 min	4.78	7-9-11-9-5(8.2)	-
4128	**Vanilla ice cream**	Salmonella Livingstone Ad1169	Dairy product	HT 56°C 10 min	4.78	7-9-11-9-5(8.2)	-
5094	**Skimmed milk powder**	Salmonella Livingstone Ad1169	Dairy product	HT 8 min 56°C	0.90	6-9-9-3-6 (6.6)	+
5101	**Skimmed milk powder**	Salmonella Livingstone Ad1169	Dairy product	HT 8 min 56°C	0.90	6-9-9-3-6 (6.6)	+
5108	**Hypoallergenic infant formula milk powder**	Salmonella Livingstone Ad1169	Dairy product	HT 8 min 56°C	0.90	6-9-9-3-6 (6.6)	+
3849	**Endive in the browned ham**	Salmonella London A00P085	Ready to eat (Chinese cook)	34 days 4°C	0.33	5-5-5-5-5 (5.0)	+
3850	**Nems with crab**	Salmonella London A00P085	Ready to eat (Chinese cook)	34 days 4°C	0.33	5-5-5-5-5 (5.0)	+
3851	**Ready to eat scallops**	Salmonella London A00P085	Ready to eat (Chinese cook)	34 days 4°C	0.33	5-5-5-5-5 (5.0)	+
5145	**Culinary product (beef)**	Salmonella London A00P085	Pâté	HT 8 min 56°C	1.95	1-0-3-1-3(1.6)	+
5146	**Culinary product (veal)**	Salmonella London A00P085	Pâté	HT 8 min 56°C	1.95	1-0-3-1-3(1.6)	+
2955	**Egg yolk powder**	Salmonella Mbandaka 81	Whole egg product	HT 56°C 10 min	2.55	4-2-4-0-1(2.2)	+
2956	**Whole egg powder**	Salmonella Mbandaka 81	Whole egg product	HT 56°C 10 min	2.55	4-2-4-0-1(2.2)	+
2957	**White egg powder**	Salmonella Mbandaka 81	Whole egg product	HT 56°C 10 min	2.55	4-2-4-0-1(2.2)	+
2961	**White egg powder**	Salmonella Mbandaka 81	Whole egg product	HT 56°C 10 min	2.55	4-2-4-0-1(2.2)	+
2962	**Whole egg powder**	Salmonella Mbandaka 81	Whole egg product	HT 56°C 10 min	2.55	4-2-4-0-1(2.2)	+
100	**Dehydrated sliced onions**	Salmonella Mbandaka Ad1648	Environmental sample	HT 6 min 56°C	0.7	18-9-12-18-6(12.6)	-
20	**Instant coffee**	Salmonella Mbandaka Ad1648	Environmental sample	HT 8 min 56°C	1.28	6-3-4-4-7 (4.8)	-
24	**Instant coffee**	Salmonella Mbandaka Ad1648	Environmental sample	HT 8 min 56°C	1.28	6-3-4-4-7 (4.8)	-
4257	**Pasteurised milk cheese**	Salmonella Mbandaka Ad1722	Dairy product	HT 56°C 10 min	3.74	0-0-0-0-0(0)	-
4260	**Dairy based dessert**	Salmonella Mbandaka Ad1722	Dairy product	HT 56°C 10 min	3.74	0-0-0-0-0(0)	-
4263	**Dairy based dessert(cream**	Salmonella Mbandaka Ad1722	Dairy product	HT 56°C 10 min	3.74	0-0-0-0-0(0)	-

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
	mousse)						
4987	**Infant formula milk powder with probiotics Lactobacillus reuteri DSM 17938 (2,0.10²/g)**	Salmonella Mbandaka Ad1722	Raw milk	HT 8 min 56°C	0.82	7-8-10-8-9 (8.4)	+
4993	**Infant formula milk powder**	Salmonella Mbandaka Ad1722	Raw milk	HT 8 min 56°C	0.82	7-8-10-8-9 (8.4)	-
4997	**Infant formula milk powder**	Salmonella Mbandaka Ad1722	Raw milk	HT 8 min 56°C	0.82	7-8-10-8-9 (8.4)	+
4983	**Spice**	Salmonella Mbandaka Ad1723	Compost	HT 8 min 56°C	1.47	18-15-10-12-7 (12.4)	-
5130	**Dehydrated rosemary**	Salmonella Mbandaka Ad1723	Compost	HT 8 min 56°C	0.30	23-22-18-26-19(21.6)	-
5513	**Oriental spices**	Salmonella Mbandaka Ad1723	Compost	HT 8 min 56°C	1.85	45-32-49-53-37(43.2)	-
5514	**Oriental spices**	Salmonella Mbandaka Ad1723	Compost	HT 8 min 56°C	1.85	79-64-66-66-60(67.0)	-
540	**Laurier**	Salmonella Mbandaka Ad1723	Compost	Lyophilisation	0.22	12-8-14-18-4(11.2)	+
541	**Thyme**	Salmonella Mbandaka Ad1723	Compost	Lyophilisation	0.22	12-8-14-18-4(11.2)	-
542	**Dehydrated sliced onions**	Salmonella Mbandaka Ad1723	Compost	Lyophilisation	0.22	12-8-14-18-4(11.2)	+
676	**Thyme**	Salmonella Mbandaka Ad1723	Compost	Lyophilisate + product (contact 72h)	0.3	28-25-30-19-29 (26.2)	+
683	**Spices for couscous**	Salmonella Mbandaka Ad1723	Compost	Lyophilisate + product (contact 72h)	0.26	10-17-13-18-13 (14.2)	+
21	**Instant coffee**	Salmonella Mbandaka Ad1723	Compost	HT 5 min 56°C	0.65	8-11-11-11-15 (11.2)	-
531	**Instant coffee**	Salmonella Mbandaka Ad1723	Compost	Lyophilisation	0.22	12-8-14-18-4(11.2)	-
532	**Instant coffee**	Salmonella Mbandaka Ad1723	Compost	Lyophilisation	0.22	12-8-14-18-4(11.2)	-
533	**Instant coffee**	Salmonella Mbandaka Ad1723	Compost	Lyophilisation	0.22	12-8-14-18-4(11.2)	-
5095	**Half skimmed milk powder**	Salmonella Mbandaka Ad1810	Cheese	HT 8 min 56°C	0.82	1-1-0-0-0 (0.4)	-
5102	**Skimmed milk powder**	Salmonella Mbandaka Ad1810	Cheese	HT 8 min 56°C	0.82	1-1-0-0-0 (0.4)	-
5109	**Infant formula milk powder with probiotics Bifidobacterium / Lactic ferment**	Salmonella Mbandaka Ad1810	Cheese	HT 8 min 56°C	0.82	1-1-0-0-0 (0.4)	-
2855	**Raw milk cheese**	Salmonella Meleagridis 505	Raw milk	pH4 -3 months	0.87	3-2-8-4-3(4.0)	+
2856	**Raw milk cheese**	Salmonella Meleagridis 505	Raw milk	pH4 -3 months	0.87	3-2-8-4-3(4.0)	+
2857	**Raw milk cheese**	Salmonella Meleagridis 505	Raw milk	pH4 -3 months	0.87	3-2-8-4-3(4.0)	+
2860	**Fermented milk**	Salmonella Meleagridis 505	Raw milk	pH4 -3 months	0.87	3-2-8-4-3(4.0)	+

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
2861	**Fermented milk**	Salmonella Meleagridis 505	Raw milk	pH4 -3 months	0.87	3-2-8-4-3(4.0)	**+**
4985	**Hypoallergenic infant formula milk powder**	Salmonella Meleagridis 505	Raw milk	HT 8 min 56°C	1.11	7-8-8-9-10 (8.4)	+
4990	**Infant formula milk powder with probiotics - Bifidobacterium / Lactic ferment (5,2.10^5/g)**	Salmonella Meleagridis 505	Raw milk	HT 8 min 56°C	1.11	7-8-8-9-10 (8.4)	-
4991	**Infant formula milk powder**	Salmonella Meleagridis 505	Raw milk	HT 8 min 56°C	1.11	7-8-8-9-10 (8.4)	-
5096	**Skimmed milk powder**	Salmonella Mikawasima Ad1813	Raw ewe milk	HT 8 min 56°C	0.84	0-7-7-10-6 (6.0)	+
5103	**Skimmed milk powder**	Salmonella Mikawasima Ad1813	Raw ewe milk	HT 8 min 56°C	0.84	0-7-7-10-6 (6.0)	+
5110	**Infant formula milk powder with probiotics Lactobacillus reuteri - S.thermophilus (7,2.10^4/g)**	Salmonella Mikawasima Ad1813	Raw ewe milk	HT 8 min 56°C	0.84	0-7-7-10-6 (6.0)	+
4255	**Pasteurised milk cheese**	Salmonella Montevideo 510	Dairy product	HT 56°C 10 min	1.05	0-0-0-0-0(0)	**-**
4258	**Dairy based dessert(Tiramisu)**	Salmonella Montevideo 510	Dairy product	HT 56°C 10 min	1.05	0-0-0-0-0(0)	**-**
4986	**Hypoallergenic infant formula milk powder**	Salmonella Montevideo 510	Raw milk	HT 8 min 56°C	0.68	8-6-13-9-9 (9.0)	+
4992	**Infant formula milk powder**	Salmonella Montevideo 510	Raw milk	HT 8 min 56°C	0.68	8-6-13-9-9 (9.0)	+
4996	**Infant formula milk powder**	Salmonella Montevideo 510	Raw milk	HT 8 min 56°C	0.68	8-6-13-9-9 (9.0)	-
5654	**Dusts**	Salmonella Montevideo 606	Raw milk	11 days 4°C	0.64	5-5-7-3-5 (5.0)	**+**
5655	**Dusts**	Salmonella Montevideo 606	Raw milk	11 days 4°C	0.64	5-5-7-3-5 (5.0)	**+**
5656	**Dusts**	Salmonella Montevideo 606	Raw milk	11 days 4°C	0.64	5-5-7-3-5 (5.0)	**+**
4989	**Infant formula milk powder with probiotics - Bifidobacterium / Lactic ferment (6,0.10^2/g)**	Salmonella Norwich Ad1172	Dairy product	HT 8 min 56°C	0.63	8-9-8-15-9 (9.8)	+
4995	**Infant formula milk powder**	Salmonella Norwich Ad1172	Dairy product	HT 8 min 56°C	0.63	8-9-8-15-9 (9.8)	+
4999	**Milk powder**	Salmonella Norwich Ad1172	Dairy product	HT 8 min 56°C	0.63	8-9-8-15-9 (9.8)	+
4256	**Pasteurised milk cheese**	Salmonella Ohio Ad1482	Dairy product	HT 56°C 10 min	0.77	5-2-2-6-4(3.8)	**+**
4259	**Panna cotta**	Salmonella Ohio Ad1482	Dairy product	HT 56°C 10 min	0.77	5-2-2-6-4(3.8)	**-**
4261	**Dairy based dessert**	Salmonella Ohio Ad1482	Dairy product	HT 56°C 10 min	0.77	5-2-2-6-4(3.8)	**-**
4262	**Dairy based dessert**	Salmonella Ohio Ad1482	Dairy product	HT 56°C 10 min	0.77	5-2-2-6-4(3.8)	**+**

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
4392	Pasteurised milk cheese	Salmonella Ohio Ad1482	Raw milk	4°C-5 months	0.56	47-9-18-11-6(12.2)	+
4393	Pasteurised milk cheese	Salmonella Ohio Ad1482	Raw milk	4°C-5 months	0.56	47-9-18-11-6(12.2)	+
4498	Raw milk cheese	Salmonella Ohio Ad1482	Raw milk	4°C-5 months	0.56	17-17-10-6-8(11.6)	+
4988	Infant formula milk powder with probiotics Bifidobacterium / Lactic ferment	Salmonella Ohio Ad1482	Raw milk	HT 8 min 56°C	0.60	7-7-8-6-11 (7.8)	-
4994	Infant formula milk powder	Salmonella Ohio Ad1482	Raw milk	HT 8 min 56°C	0.60	7-7-8-6-11 (7.8)	-
4998	Infant formula milk powder	Salmonella Ohio Ad1482	Raw milk	HT 8 min 56°C	0.60	7-7-8-6-11 (7.8)	-
3757	Cooked meat tomatoes	Salmonella Oranienburg Ad1724	Vegetable	HT 56°C 10 min	0.73	2-2-1-2-2 (1.8)	-
3758	Cooked sandwich tomato/sweet pepper	Salmonella Oranienburg Ad1724	Vegetable	HT 56°C 10 min	0.73	2-2-1-2-2 (1.8)	-
5129	Cocoa powder (100% cocoa)	Salmonella Oranienburg Ad1724	Infant cereals	HT 56°C 8mn	1.95	2-3-4-6-2(3.4)	+
26	Cocoa mass	Salmonella Oranienburg Ad1724	Infant cereals	HT 56°C 8mn	0.91	5-8-4-7-8 (6.4)	+
29	Cocoa butter	Salmonella Oranienburg Ad1724	Infant cereals	HT 56°C 8mn	0.91	5-8-4-7-8 (6.4)	+
4197	Culinary product (beef)	Salmonella Oranienburg Ad1724	Infant cereals	HT 8 min 56°C	0.50	1-0-5-3-6(3.0)	+
4201	Instant infusion	Salmonella Oranienburg Ad1724	Infant cereals	HT 8 min 56°C	0.50	1-0-5-3-6(3.0)	+
4205	Instant coffee	Salmonella Oranienburg Ad1724	Infant cereals	HT 8 min 56°C	0.50	1-0-5-3-6(3.0)	-
4984	Ground grey pepper	Salmonella Orianenburg Ad1724	Infant cereals	HT 8 min 56°C	0.84	21-20-27-23-24 (23.0)	+
4867	Dehydrated fenel	Salmonella Ovakam Ad1647	Compost	HT 8 min 56°C	2.56	4-4-4-6-6 (4.8)	-
4868	Dehydrated oregano	Salmonella Ovakam Ad1647	Compost	HT 8 min 56°C	2.56	4-4-4-6-6 (4.8)	-
4869	Dehydrated marjoram	Salmonella Ovakam Ad1647	Compost	HT 8 min 56°C	2.56	4-4-4-6-6 (4.8)	-
4870	Dehydrated dill	Salmonella Ovakam Ad1647	Compost	HT 8 min 56°C	2.56	4-4-4-6-6 (4.8)	-
5132	Spices for rice	Salmonella Ovakam Ad1647	Compost	HT 8 min 56°C	1.22	18-39-29-32-28(29.2)	-
537	Chive	Salmonella Ovakam Ad1647	Compost	Lyophilisation	0.06	11-16-16-9-14(13.2)	+
538	Dehydrated oregano	Salmonella Ovakam Ad1647	Compost	Lyophilisation	0.06	11-16-16-9-14(13.2)	-
674	Dehydrated rosemary	Salmonella Ovakam Ad1647	Compost	Lyophilisate + product (contact 72h)	0.08	15-26-18-29-19 (21.4)	+
527	Instant tee	Salmonella Ovakam Ad1647	Compost	Lyophilisation	0.06	11-16-16-9-14(13.2)	+
528	Instant coffee	Salmonella Ovakam Ad1647	Compost	Lyophilisation	0.06	11-16-16-9-14(13.2)	+

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
666	**Instant coffee**	Salmonella Ovakam Ad1647	Compost	Lyophilisation	0.32	7-7-4-8-5 (6.2)	-
667	**Instant coffee**	Salmonella Ovakam Ad1647	Compost	Lyophilisation	0.32	7-7-4-8-5 (6.2)	-
669	**Instant tee**	Salmonella Ovakam Ad1647	Compost	Lyophilisation	0.32	7-7-4-8-5 (6.2)	+
5693	**Culinary product (beef)**	Salmonella Panama 195	Ground beef	HT 8 min 56°C	1.71	3-2-3-3-2(2.6)	-
5694	**Culinary product (beef)**	Salmonella Panama 195	Ground beef	HT 8 min 56°C	1.71	3-2-3-3-2(2.6)	-
5700	**Culinary product (beef)**	Salmonella Panama 195	Ground beef	HT 8 min 56°C	1.71	3-2-3-3-2(2.6)	-
5701	**Culinary product (beef)**	Salmonella Panama 195	Ground beef	HT 8 min 56°C	1.71	3-2-3-3-2(2.6)	-
5702	**Concentrate**	Salmonella Panama 195	Ground beef	HT 8 min 56°C	1.71	3-2-3-3-2(2.6)	-
735	**Concentrate (beef)**	Salmonella Panama 195	Ground beef	HT 56°C 8min	1.9	2-5-3-5-5 (4.0)	-
799	**Culinary product (beef)**	Salmonella Panama 195	Ground beef	HT 56°C 8min	1.9	15-14-10-12-18 (13.8)	-
3751	**Ready to eat pork**	Salmonella Panama 882	Sausage	HT 56°C 10 min	2.82	1-3-1-1-0 (1.2)	**-**
3752	**Ready to eat pork**	Salmonella Panama 882	Sausage	HT 56°C 10 min	2.82	1-3-1-1-0 (1.2)	**+**
3753	**Ready to eat chicken**	Salmonella Panama 882	Sausage	HT 56°C 10 min	2.82	1-3-1-1-0 (1.2)	**+**
3754	**Lasagne**	Salmonella Panama 882	Sausage	HT 56°C 10 min	2.82	1-3-1-1-0 (1.2)	**-**
4982	**Curry**	Salmonella Panama Ad1733	Infant cereals	HT 8 min 56°C	1.97	16-14-14-19-21 (16.8)	-
5134	**Mexican spices**	Salmonella Panama Ad1733	Infant cereals	HT 8 min 56°C	1.71	25-17-19-17-10(17.6)	+
534	**Thyme**	Salmonella Panama Ad1733	Infant cereals	Lyophilisation	0.1	10-17-15-18-13(14.6)	-
535	**Dehydrated herbs (provence)**	Salmonella Panama Ad1733	Infant cereals	Lyophilisation	0.1	10-17-15-18-13(14.6)	+
543	**Dehydrated fried onions**	Salmonella Panama Ad1733	Infant cereals	Lyophilisation	0.1	10-17-15-18-13(14.6)	+
544	**Dehydrated shallots**	Salmonella Panama Ad1733	Infant cereals	Lyophilisation	0.1	10-17-15-18-13(14.6)	+
675	**Dehydrated basil leaves**	Salmonella Panama Ad1733	Infant cereals	Lyophilisate + product (contact 72h)	0.86	7-7-6-7-6 (6.6)	-
678	**Spices for guacamole**	Salmonella Panama Ad1733	Infant cereals	Lyophilisation	0.3	14-13-22-26-18 (18.6)	-
4199	**Culinary product (poultry)**	Salmonella Panama Ad1733	Infant cereals	HT 8 min 56°C	1.50	7-6-3-1-0(3.4)	+
4203	**Instant coffee**	Salmonella Panama Ad1733	Infant cereals	HT 8 min 56°C	1.50	7-6-3-1-0(3.4)	-
22	**Instant coffee**	Salmonella Panama Ad1733	Compost	Lyophilisation	0.1	10-17-15-18-13(14.6)	-
23	**Instant coffee**	Salmonella Panama Ad1733	Compost	Lyophilisation	0.1	10-17-15-18-13(14.6)	-
521	**Concentrate (poultry)**	Salmonella Panama Ad1733	Compost	Lyophilisation	0.1	10-17-15-18-13(14.6)	+

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
522	**Concentrate (Mushrooms)**	Salmonella Panama Ad1733	Compost	Lyophilisation	0.1	10-17-15-18-13(14.6)	-
733	**Concentrate (roasted chicken)**	Salmonella Saintpaul 631	Poultry	HT 56°C 8min	2.13	2-5-5-3-2 (3.4)	+
797	**Culinary product (hen)**	Salmonella Saintpaul 631	Poultry	HT 56°C 8min	2.13	18-15-24-17-11 (17)	+
5428	**Wipe**	Salmonella Stanley Ad1688	Environmental sample	7 days 4°C	0.7	4-3-4-7-2(4.0)	-
5430	**Process water**	Salmonella Stanley Ad1688	Environmental sample	7 days 4°C	0.7	4-3-4-7-2(4.0)	+
5431	**Process water**	Salmonella Stanley Ad1688	Environmental sample	7 days 4°C	0.7	4-3-4-7-2(4.0)	+
5434	**Process water**	Salmonella Stanley Ad1688	Environmental sample	7 days 4°C	0.7	4-3-4-7-2(4.0)	+
5494	**Chocolate bar (90% cocoa)**	Salmonella Stanley Ad1688	Chocolate industry	HT 56°C 8mn	1.53	22-10-15-13-13 (14.6)	+
5498	**Chocolate powder (100% cocoa)**	Salmonella Stanley Ad1688	Chocolate industry	HT 56°C 8mn	1.53	22-10-15-13-13 (14.6)	-
5502	**Cocoa based product (30% cocoa)**	Salmonella Stanley Ad1688	Chocolate industry	HT 56°C 8mn	1.53	22-10-15-13-13 (14.6)	+
5506	**Cocoa based product (32% cocoa)**	Salmonella Stanley Ad1688	Chocolate industry	HT 56°C 8mn	1.53	22-10-15-13-13 (14.6)	-
5510	**Cocoa based product**	Salmonella Stanley Ad1688	Chocolate industry	HT 56°C 8mn	1.53	22-10-15-13-13 (14.6)	-
5098	**Skimmed milk powder**	Salmonella Tennessee Ad1171	Dairy product	HT 8 min 56°C	1.10	11-9-13-5-11 (9.8)	+
5105	**Hypoallergenic infant formula milk powder**	Salmonella Tennessee Ad1171	Dairy product	HT 8 min 56°C	1.10	11-9-13-5-11 (9.8)	+
5112	**Infant formula milk powder with probiotics**	Salmonella Tennessee Ad1171	Dairy product	HT 8 min 56°C	1.10	11-9-13-5-11 (9.8)	+
3852	**Raw white egg product**	Salmonella Typhimurium 206	Whole egg product	41 days 4°C	0.81	4-3-3-3-7 (4.0)	+
3853	**Raw egg yolk product**	Salmonella Typhimurium 206	Whole egg product	41 days 4°C	0.81	4-3-3-3-7 (4.0)	+
3854	**Raw whole egg product**	Salmonella Typhimurium 206	Whole egg product	41 days 4°C	0.81	4-3-3-3-7 (4.0)	+
3855	**Raw egg white product**	Salmonella Typhimurium 206	Whole egg product	41 days 4°C	0.81	4-3-3-3-7 (4.0)	+
3856	**Raw egg yolk product**	Salmonella Typhimurium 206	Whole egg product	41 days 4°C	0.81	4-3-3-3-7 (4.0)	+
3501	**Frozen mushrooms**	Salmonella Typhimurium 305	Paella	13 days -20°C	1.45	3-2-2-2-0(1.8)	+
3502	**Frozen peas**	Salmonella Typhimurium 305	Paella	13 days -20°C	1.45	3-2-2-2-0(1.8)	+
3503	**Frozen zucchini**	Salmonella Typhimurium 305	Paella	13 days -20°C	1.45	3-2-2-2-0(1.8)	+
3504	**Frozen beans**	Salmonella Typhimurium 305	Paella	13 days -20°C	1.45	3-2-2-2-0(1.8)	+
3505	**Frozen beans**	Salmonella Typhimurium 305	Paella	13 days -20°C	1.45	3-2-2-2-0(1.8)	+
5395	**Infant formula milk powder**	Salmonella Typhimurium 4	Milk powder	HT 8 min 56°C	0.50	8-17-12-10-11 (11.6)	-

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
5398	**Skimmed milk powder**	Salmonella Typhimurium 4	Milk powder	HT 8 min 56°C	0.50	8-17-12-10-11 (11.6)	+
5688	**Infant formula milk powder with probiotics - Lactobacillus reuteri DSM 17938 0,1%**	Salmonella Typhimurium 4	Milk powder	HT 8 min 56°C	0.86	14-16-15-19-19(16.6)	+
5143	**Culinary product (veal)**	Salmonella Typhimurium 4874	Pâté	HT 8 min 56°C	1.18	1-3-2-3-3(2.4)	+
5144	**Culinary product (beef)**	Salmonella Typhimurium 4874	Pâté	HT 8 min 56°C	1.18	1-3-2-3-3(2.4)	+
3215	**Pasteurized white egg product**	Salmonella Typhimurium 776	Whole egg product	4°C -2months	0.47	5-6-5-4-5(5.0)	+
3216	**Pasteurized egg yolk product**	Salmonella Typhimurium 776	Whole egg product	4°C -2months	0.47	5-6-5-4-5(5.0)	+
3219	**Egg cream**	Salmonella Typhimurium 776	Whole egg product	4°C -2months	0.47	5-6-5-4-5(5.0)	+
3220	**Cooked custard with apples**	Salmonella Typhimurium 776	Whole egg product	4°C -2months	0.47	5-6-5-4-5(5.0)	+
3221	**Flotting island with English cream**	Salmonella Typhimurium 776	Whole egg product	4°C -2months	0.47	5-6-5-4-5(5.0)	+
5285	**Wipe**	Salmonella Typhimurium Ad1070	Environmental sample	6 days 4°C	0.42	4-6-2-1-3(3.2)	+
5286	**Wipe**	Salmonella Typhimurium Ad1070	Environmental sample	6 days 4°C	0.42	4-6-2-1-3(3.2)	+
5289	**Process water**	Salmonella Typhimurium Ad1070	Environmental sample	HT 8 min 56°C	1.45	2-1-0-0-2(1.0)	+
5290	**Process water**	Salmonella Typhimurium Ad1070	Environmental sample	HT 8 min 56°C	1.45	2-1-0-0-2(1.0)	+
5429	**Wipe**	Salmonella Typhimurium Ad1070	Environmental sample	7 days 4°C	0.43	7-4-4-8-11(6.8)	-
519	**Concentrate (pork)**	Salmonella Typhimurium Ad1070	Environmental sample (pork)	4°C / 49 days	0.78	22-6-20-21-16 (17.0)	+
4971	**Chocolate bar (64% cocoa)**	Salmonella Typhimurium Ad1333	Tiramisu	HT 56°C 8mn	1.06	1-3-3-1-1 (1.8)	-
4975	**Cocoa powder (100% cocoa)**	Salmonella Typhimurium Ad1333	Tiramisu	HT 56°C 8mn	1.06	1-3-3-1-1 (1.8)	+
4979	**Chocolate powder (50% cocoa)**	Salmonella Typhimurium Ad1333	Tiramisu	HT 56°C 8mn	1.06	1-3-3-1-1 (1.8)	-
27	**Cocoa butter**	Salmonella Typhimurium Ad1333	Tiramisu	HT 56°C 8mn	1.42	23-23-27-34-27 (26.8)	+
736	**Concentrate (pork)**	Salmonella Typhimurium Ad1410	Pork	HT 56°C 8min	1.12	3-4-5-4-3 (3.8)	-
800	**Culinary product (beef)**	Salmonella Typhimurium Ad1410	Pork	HT 56°C 8min	1.12	7-21-17-16-13 (14.8)	-
3224	**Mayonnaise**	Salmonella Typhimurium Ad1484	Whole egg product	pH 4 -3 months	0.62	5-1-8-7-5(5.2)	+
3225	**Mayonnaise**	Salmonella Typhimurium Ad1484	Whole egg product	pH 4 -3 months	0.62	5-1-8-7-5(5.2)	+
3226	**Mayonnaise**	Salmonella Typhimurium Ad1484	Whole egg product	pH 4 -3 months	0.62	5-1-8-7-5(5.2)	+
13	**Instant tee**	Salmonella Typhimurium Ad1546	Water	HT 8 min 56°C	0.92	6-10-6-6-4 (6.4)	-
15	**Instant coffee**	Salmonella Typhimurium Ad1546	Water	HT 8 min 56°C	0.92	6-10-6-6-4 (6.4)	-

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
16	**Instant coffee**	Salmonella Typhimurium Ad1546	Water	HT 8 min 56°C	0.92	6-10-6-6-4 (6.4)	-
17	**Instant coffee**	Salmonella Typhimurium Ad1546	Water	HT 8 min 56°C	0.92	6-10-6-6-4 (6.4)	-
18	**Instant coffee**	Salmonella Typhimurium Ad1546	Water	HT 8 min 56°C	0.92	6-10-6-6-4 (6.4)	-
523	**Concentrate (onions)**	Salmonella Typhimurium Ad1546	Compost	HT 8 min 56°C /30 days 4°C	1.93	36-37-19-32-46(36.0)	-
3513	**Poultry and vegetables crumble**	Salmonella Typhimurium Ad1603	Ready to eat meal (salmon and vegetables)	HT 56°C 10 min	1.22	0-2-1-2-1(1.2)	+
3514	**Vegetables couscous**	Salmonella Typhimurium Ad1603	Ready to eat meal (salmon and vegetables)	HT 56°C 10 min	1.22	0-2-1-2-1(1.2)	+
3515	**Beans, carrots, broccoli**	Salmonella Typhimurium Ad1603	Ready to eat meal (salmon and vegetables)	HT 56°C 10 min	1.22	0-2-1-2-1(1.2)	+
5493	**Chocolate bar (47% cocoa)**	Salmonella Typhimurium Ad1682	Chocolate	HT 56°C 8mn	0.91	13-15-18-10-9 (13.0)	+
5497	**Chocolate (50% cocoa)**	Salmonella Typhimurium Ad1682	Chocolate	HT 56°C 8mn	0.91	13-15-18-10-9 (13.0)	+
5501	**Chocolate powder (100% cocoa)**	Salmonella Typhimurium Ad1682	Chocolate	HT 56°C 8mn	0.91	13-15-18-10-9 (13.0)	+
5505	**Cocoa based product (32% cocoa)**	Salmonella Typhimurium Ad1682	Chocolate	HT 56°C 8mn	0.91	13-15-18-10-9 (13.0)	+
5509	**Cocoa based product (32% cocoa)**	Salmonella Typhimurium Ad1682	Chocolate	HT 56°C 8mn	0.91	13-15-18-10-9 (13.0)	+
226	**Cocoa butter**	Salmonella Typhimurium Ad2034	Cocoa beans	HT 56° 8 min	2.05	1-9-11-7-10(7.6)	+
227	**Cocoa butter**	Salmonella Typhimurium Ad2034	Cocoa beans	HT 56° 8 min	2.05	1-9-11-7-10(7.6)	+
228	**Cocoa shells**	Salmonella Typhimurium Ad2034	Cocoa beans	HT 56° 8 min	2.05	1-9-11-7-10(7.6)	-
229	**Milk chocolate (raw material)**	Salmonella Typhimurium Ad2034	Cocoa beans	HT 56° 8 min	2.05	1-9-11-7-10(7.6)	+
4878	**Spices for paella**	Salmonella Virchow Ad1721	Infant cereals	HT 8 min 56°C	2.00	0-0-0-1-1 (0.4)	-
4879	**Four spices mix**	Salmonella Virchow Ad1721	Infant cereals	HT 8 min 56°C	2.00	0-0-0-1-1 (0.4)	-
4980	**Ground cinnamon**	Salmonella Virchow Ad1721	Infant cereals	HT 8 min 56°C	0.75	13-13-14-15-13 (13.6)	+
437	**Garlic**	Salmonella Virchow Ad1721	Infant cereals	Lyophilisation	0.17	8-10-7-6-6(7.4)	+
438	**Dehydrated sliced onions**	Salmonella Virchow Ad1721	Infant cereals	Lyophilisation	0.17	8-10-7-6-6(7.4)	+
441	**Dehydrated rosemary**	Salmonella Virchow Ad1721	Infant cereals	Lyophilisation	0.17	8-10-7-6-6(7.4)	+
684	**Spices for colombo**	Salmonella Virchow Ad1721	Infant cereals	Lyophilisate + product (contact 72h)	0.07	22-28-15-23-18 (21.2)	+
431	**Instant coffee**	Salmonella Virchow Ad1721	Cereals	Lyophilisation	0.17	8-10-7-6-6(7.4)	-
433	**Instant coffee**	Salmonella Virchow Ad1721	Cereals	Lyophilisation	0.17	8-10-7-6-6(7.4)	-

N° Sample	Products	Artificial contaminations (spiking protocol)					Global result
		Strain	Origin	Injury protocol / lyophilisation	Injury measurement	Inoculation level/25g	
3508	**Vegetable tortilla with cheese**	Salmonella Virchow F276	Curry	70 days 4°C	1.20	1-2-2-5-2(2.4)	+
3509	**Tomato and mozzarella salad**	Salmonella Virchow F276	Curry	70 days 4°C	1.20	1-2-2-5-2(2.4)	+
3510	**Vegetables and egg salad**	Salmonella Virchow F276	Curry	70 days 4°C	1.20	1-2-2-5-2(2.4)	+
3511	**Celery salad**	Salmonella Virchow F276	Curry	70 days 4°C	1.20	1-2-2-5-2(2.4)	+
3512	**Carrots salad**	Salmonella Virchow F276	Curry	70 days 4°C	1.20	1-2-2-5-2(2.4)	+
3885	**Deli salad (pasta, vegetables)**	Salmonella Virchow F276	Curry	HT 56°C 10 min	0.53	4-7-8-4-5 (5.6)	-
3886	**Deli salad(vegetables mix)**	Salmonella Virchow F276	Curry	HT 56°C 10 min	0.53	4-7-8-4-5 (5.6)	-
4872	**Ground cinnamon**	Salmonella Virchow F276	Curry	HT 8 min 56°C	1.22	1-2-0-1-1 (1.0)	+
4873	**Ground nutmeg**	Salmonella Virchow F276	Curry	HT 8 min 56°C	1.22	1-2-0-1-1 (1.0)	-
4874	**Ground ginger**	Salmonella Virchow F276	Curry	HT 8 min 56°C	1.22	1-2-0-1-1 (1.0)	-
4875	**Turmeric**	Salmonella Virchow F276	Curry	HT 8 min 56°C	1.22	1-2-0-1-1 (1.0)	-
4876	**Soft paprika**	Salmonella Virchow F276	Curry	HT 8 min 56°C	1.22	1-2-0-1-1 (1.0)	-
350	**Hot curry**	Salmonella Virchow F276	Curry	Lyophilisation	0.3	3-8-4-8-8(6.2)	+
351	**Turmeric**	Salmonella Virchow F276	Curry	Lyophilisation	0.3	30-29-18-33-21(26.2)	-
444	**Mexican spices**	Salmonella Virchow F276	Curry	Lyophilisation	0.51	7-5-11-7-6(7.2)	-
445	**Spices for paella**	Salmonella Virchow F276	Curry	Lyophilisation	0.51	7-5-11-7-6(7.2)	-
680	**Spices for tagine**	Salmonella Virchow F276	Curry	Lyophilisate + product (contact 72h)	0	37-44-41-39-41 (40.4)	-
682	**Spices for paella**	Salmonella Virchow F276	Curry	Lyophilisate + product (contact 72h)	0.4	32-19-28-26-23 (25.6)	+
685	**Ground cinnamon**	Salmonella Virchow F276	Curry	Lyophilisate + product (contact 72h)	0.36	10-9-9-7-12(9.4)	+
4196	**Culinary product (veal)**	Salmonella Virchow F276	Curry	HT 8 min 56°C	0.65	3-6-2-6-4(4.2)	+

Appendix 4 – Relative accuracy: raw data

Bold typing: artificial contaminations
st: plate without colonies

NC: non characteristic colonies on nutrient agar
+1/2:50% target

+/-: doubtful colonies
+m:minority of target bacteria

ox: oxidase test
+M:majority of target bacteria

ni: non isolated colonies
p: culture

MEAT PRODUCTS

N° Sample	Product	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																				Protocol
								18 H at 37°C or 41,5°C												BPW storage 72 H at 4°C				Lysates storage 72 H at 4°C				
								MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Confirmation Protocol 1 (BPW 37°C)		Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	
			RVS broth		MKTTn broth		Result		RVS broth		MKTTn broth		Latex	Tests ref (API/Aggl)	Confir-mation	Protocol 1 (ISO 6579)	Latex test											
			XLD	ASAP	XLD	ASAP			XLD	ASAP	XLD	ASAP																
2838	Minced poultry meat	+	+1/2	+1/2	+m	+1/2	+	+	+m	+m	+1/2	+M	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
2839	Pork meat	+	+M	+M	+M	+m	+	+	+M	+M	+M	+p	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
2840	Ground poultry meat	+	+m	+m	+m	+m	+	+	+m	+m	+m	+m	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
2841	Minced poultry meat	+	+m	+1/2	+m	+m	+	+	+1/2	+M	+M	+M	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
2842	Raw pork meat	+	-	-	-	-	-	+	+M	+M	+M	+M	+	+	+	/	/	+	PD	+	+	+	PD	+	+	+	PD	2
2843	Duck gizzards	+	+m	+1/2	+1/2	+m	+	+	+m	+1/2	+m	+m	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
2844	Sausages	+	-	-	+m	-	+	-	+M	+M	+p	+p	+	+	+	/	/	-	ND	-	-	-	ND	-	-	-	ND	2
2845	Minced poultry meat	+	+1/2	+1/2	+m	+M	+	+	+m	+1/2	+M	+M	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
2846	Pork meat	+	+M	+M	+M	+M	+	+	+M	+M	+M	+M	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
2847	Minced poultry meat	-	-	+/-m/-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
2848	Minced meat	+	+m	+1/2	+m	+M	+	+	+m	+1/2	+1/2	+M	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
2849	Ground poultry meat	+	+/-m/-	-	-	-	-	+	+/+m	+/-m/-	+m	+m	+	+	+	/	/	+	PD	-	+	-	NA	-	+	-	NA	2
2850	Pork liver	+	-	-	-	-	-	+	+M	+M	+m	+1/2	+	+	+	/	/	+	PD	+	+	+	PD	+	+	+	PD	2
2851	Duck liver	-	+/-m/-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
2852	Poutry fillet skin	+	+/-m(NC)	-	-	-	-	+	+M	+m	+M	+M	+	+	+	/	/	+	PD	+	+	+	PD	+	+	+	PD	2
3362	Turkey raw meat	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3363	Raw turkey meat	+	-	-	-	-	-	+	+m	+m	+M	+M	+	+	+	/	/	+	PD	+	+	+	PD	+	+	+	PD	2
3364	Minced poultry meat	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3365	Poultrty raw meat	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3366	Minced poultry meat	+	+m	+m	-	+	+	+	-	-	-	-	/	/	-	/	/	-	PPND	-	-	-	ND	-	-	-	ND	2
3367	Mechanically degoned turkey meat	-	-	-	-	-	-	-	-	-	+/-2col	-	-	NC	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3368	Pork raw meat	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3369	Ground chicken meat	+	+1col	-	+m	+m	+	-	+m	+m	+M	+1/2	+	+	+	/	/	-	ND	-	+	-	ND	+	+	+	PA	2
3370	Pork liver	+	+m	+m	+M	+m	+	-	-	-	-	-	/	/	-	/	/	-	ND	-	-	-	ND	-	-	-	ND	2
3371	Raw pork meat	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3372	Paupiette without pork	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3373	Raw pork meat	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3374	Minced pork meat	-	-	-	+/-m (*Citrobacter koseri*)	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	-	-	-	NA	-	-	-	NA	2

♦ Analysis performed according to the COFRAC accreditation

MEAT PRODUCTS

N° Sample	Product	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																				Protocol
								18 H at 37°C or 41,5°C												BPW storage 72 H at 4°C				Lysates storage 72 H at 4°C				
			RVS broth		MKTTn broth		Result	MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Confirmation Protocol 1 (BPW 37°C)		Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	
			XLD	ASAP	XLD	ASAP			RVS broth XLD	RVS broth ASAP	MKTTn broth XLD	MKTTn broth ASAP	Latex	Tests ref (API/Aggl)	Confir-mation	Protocol 1 (ISO 6579)	Latex test											
3375	Ground poultry meat	+	-	-	-	-	-	+	+m	+m	+M	+m	+	+	+	/	/	+	PD	+	+	+	PD	+	+	+	PD	2
3376	Minced pork meat	+	-	-	-	-	-	+	+m	+m	+M	+M	+	+	+	/	/	+	PD	+	+	+	PD	+	+	+	PD	2
3377	Ground poultry meat	+	+m	+m	+m	+m	+	+	+m	+m	+1/2	+m	+	+	+	/	/	+	PA	-	+	-	ND	+	+	+	PA	2
3378	Ground beef	+	-	-	-	-	-	+	+1col	+M	+M	+p	+	+	+	/	/	+	PD	+	+	+	PD	+	+	+	PD	2
3379	Ground beef	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3380	Turkey fillet	+	+m	+m	+m	+1/2	+	+	+M	+1/2	+M	+M	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
3381	Crepine	+	+m	+m	+M	+M	+	+	+m	+m	+m	+M	+	+	+	/	/	+	PA	+	+	+	PA	+	+	+	PA	2
3718	Pork nem	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	NA	/	/	/	/	/	/	/	/	1
3719	Beef kidney ready to eat	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	NA	/	/	/	/	/	/	/	/	1
3720	Beef tajine	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	NA	/	/	/	/	/	/	/	/	1
3721	Pork roast	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	NA	/	/	/	/	/	/	/	/	1
3746	**Pasta with chiken and mushroom**	+	+ m ni / +	+ m	+ m	+ p	+	+	/	/	/	/	/	/	/	+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3748	**Cooked beef meat**	+	+ m	+ p	+ m	+ p	+	+	/	/	/	/	/	/	/	+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3749	**Cooked chicken meat**	+	+ m	+ p	+ m	+ p	+	+	/	/	/	/	/	/	/	+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3750	**Chili con carne**	+	+ m	+ p	+ m	+ p	+	+	/	/	/	/	/	/	/	+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3751	**Ready-to-eat pork**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	NA	/	/	/	/	/	/	/	/	1
3752	**Ready-to-eat pork**	+	+ p	+ p	+ p	+ p	+	+	/	/	/	/	/	/	/	+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3753	**Ready-to-eat chicken**	+	+ p	+ p	+ p	+ p	+	+	/	/	/	/	/	/	/	+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3754	**Lasagne**	-	-	-	st	st	-	-	/	/	/	/	/	/	/	-	/	-	NA	/	/	/	/	/	/	/	/	1
3780	Calf liver	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3781	Ground beef	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3782	Beef meat	-	-	+/- ni /-	-	+/- m (oxydase +)	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3783	Turkey meat	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3784	Raw poultry meat (milanaise)	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3785	Marinated turkey meat	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3786	Raw pork meat preparation (tomatoes, basil)	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3787	Raw beef meat preparation (bolognaise)	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	NA	/	/	/	/	/	/	/	/	2
3838	Raw chicken meat	-	-	-	-	+/- ni / + *(Citrobacter freundii)*	-	-	-	-	-	-	/	/	-	/	/	-	NA	-	-	-	NA	-	-	-	NA	2
3841	Raw pork meat	-	-	-	-	-	-	-	-	-	-	-	/	/	/	/	/	-	NA	/	/	/	/	/	/	/	/	2
4120	**Ready to eat pork**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	NA	/	/	/	/	/	/	/	/	1
4121	**Ready to eat pork**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	PA	/	/	/	/	/	/	/	/	1
4122	Ready to eat pork	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	NA	/	/	/	/	/	/	/	/	1

Bold typing: artificial contaminations
st: plate without colonies

NC: non characteristic colonies on nutrient agar
+1/2:50% target

+/-: doubtful colonies
+m:minority of target bacteria

ox: oxidase test
+M:majority of target bacteria

ni: non isolated colonies
p: culture

DAIRY PRODUCTS

N° Sample	Product	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																				Protocol
								18 H at 37°C or 41,5°C												BPW storage 72 H at 4°C				Lysates storage 72 H at 4°C				
								MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Confirmation Protocol 1 (BPW 37°C)		Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	
			RVS broth		MKTTn broth		Result		RVS broth		MKTTn broth		Latex	Tests ref (API/Aggl)	Confir-mation	Protocol 1 (ISO 6579)	Latex test											
			XLD	ASAP	XLD	ASAP			XLD	ASAP	XLD	ASAP																
2855	**Raw milk cheese**	+	+M	+1/2	+M	+M	+	+	+m	+1/2	+m	+M	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2856	**Raw milk cheese**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2857	**Raw milk cheese**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2858	**Raw milk cheese**	+	+M	+M	+M	+p	+	+	+M	+m	+M	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2859	**Raw milk cheese**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+M	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2860	**Fermented milk**	+	+M	+p	+M	+p	+	+	+M	+p	+M	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2861	**Fermented milk**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2862	**Fermented milk**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2863	**Fermented milk**	+	+M	+M	+M	+p	+	+	+M	+m	+M	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2864	**Fermented milk**	+	+p	+p	+p	+p	+	+	+P	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2873	**Raw milk**	+	+m ni/	+M	+m	+m	+	+	+m	+m	+m	+m	+	+	+	/	/	+	**PA**	-	+	-	**ND**	+	+	+	**PA**	2
2874	**Raw milk**	+	+1/2	+m	+m	+1/2	+	+	+1/2	+m	+m	+1/2	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2875	**Raw milk**	+	+1/2	+1/2	+1col ni/+	+2col	+	+	+1/2	+1/2	+1col ni/+	+2col	+	+	+	/	/	+	**PA**	-	+	-	**ND**	-	+	-	**ND**	2
3533	Fermented milk	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3534	Fermented white cheese	-	-	-	st	st	-	-	-	-	-	-	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3535	Fermented milk	-	st	st	-	-	-	-	-	-	-	-	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3536	Fermented milk	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3537	Fermented milk	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3538	Fermented milk	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3539	Fermented milk	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3540	Fermented milk	-	-	-	st	st	-	-	-	-	st	-	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3541	Ewe raw milk	+	yellow colonies	+p	-	+p	+	+	yellow colonies	+p	yellow colonies	+p	XLD:+/ ASAP:-	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
3542	Ewe raw milk	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3543	Ewe raw milk cheese	-	-	-	+/-ni/-	+/-ni/-	-	-	+/-ni/-	-	+ni/+/-	-	-	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3544	Cow raw milk cheese	-	+/-ni/-	-	-	-	-	-	+ni/-	-	-	+ni/-	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3545	Ewe raw milk cheese	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3759	**Pasteurised milk**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3760	**Pasteurised half skimmed milk**	+	+ p	+ p	+ p	+ p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3769	**Pasteurized white cheese**	+	+ p	+ p	+ p	+ p	+	+	+P	+P	+P	+P	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
3770	**Cream**	+	+ p	+ p	+ p	+ p	+	+	+P	+P	+P	+P	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
3771	**Faisselle**	+	+ p	+ p	+ p	+ p	+	+	+P	+P	+P	+P	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2

♦ Analysis performed according to the COFRAC accreditation

DAIRY PRODUCTS

N° Sample	Product	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																					Protocol
								18 H at 37°C or 41,5°C												BPW storage 72 H at 4°C				Lysates storage 72 H at 4°C				
			RVS broth		MKTTn broth		Result	MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Confirmation Protocol 1 (BPW 37°C)		Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	
			XLD	ASAP	XLD	ASAP			RVS broth XLD	RVS broth ASAP	MKTTn broth XLD	MKTTn broth ASAP	Latex	Tests ref (API/Aggl)	Confir-mation	Protocol 1 (ISO 6579)	Latex test											
3772	**Fermented cheese**	+	+ p	+ p	+ p	+ p	+	+	+P	+P	+P	+P	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
3773	**Faisselle**	+	+ p	+ p	+ p	+ p	+	+	+P	+P	+P	+P	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
3836	**Raw milk cheese**	+	-	-	-	-	-	+	-	-	-	-	/	/	+ (MSRV)	/	/	+	**PD**	+/+/+	+ (MSRV)	+	**PD**	-	+ (MSRV)	-	**NA**	2
3837	**Raw milk cheese**	+	+/- ni /+	-	-	-	+	+	-	-	-	-	/	/	+ (MSRV)	/	/	+	**PA**	-	+ (MSRV)	-	**ND**	+	+ (MSRV)	+	**PA**	2
3977	Pasteurised milk	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3978	Half skimmed pasteurised milk	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3979	Pasteurised milk	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3980	Half skimmed pasteurised milk	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3981	Pasteurised milk	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3986	Raw milk cheese	-	st	st	st	st	-	-	st	st	st	st	/	/	/	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3996	Raw ewe milk	-	-	-	-	-	-	-	-	-	-	-	/	/	/	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3997	Raw ewe milk	-	-	-	-	-	-	-	-	-	-	-	/	/	/	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3998	Raw cow milk	-	-	-	-	-	-	-	-	-	-	-	/	/	/	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3999	Raw cow milk	-	-	-	-	-	-	-	-	-	-	-	/	/	/	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
4000	Raw cow milk	-	-	-	-	-	-	-	-	-	-	-	/	/	/	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
4001	Fermented milk	-	st	st	st	st	-	-	st	st	st	st	/	/	/	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
4002	Half skimmed fermented milk	-	-	-	-	-	-	-	st	st	st	st	/	/	/	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
4118	**Pasteurised milk cheese**	-	st	st	st	st	-	-	st	st	-	-	/	/	/	/	/	-	**NA**	-	-	-	**NA**	-	-	-	**NA**	2
4119	**Pasteurised milk cheese**	-	st	st	st	st	-	-	st	st	st	st	/	/	/	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
4123	**Dairy based dessert (semolina pudding)**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4124	**Dairy based dessert (rice pudding)**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4125	**Dairy based dessert (Tiramisu)**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4126	**Dairy based dessert (semolina pudding)**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
4127	**Vanilla ice cream**	-	-	-	-	-	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4128	**Vanilla ice cream**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4129	**Nougat ice cream**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4130	**Dairy based dessert**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
4131	**Dairy based dessert (rice pudding)**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4132	**Dairy based dessert (Tiramisu)**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4133	Dairy based dessert (semolina pudding)	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4134	Vanilla ice cream	-	-	-	-	-	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1

DAIRY PRODUCTS

N° Sample	Product	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																				Protocol
								18 H at 37°C or 41,5°C												BPW storage 72 H at 4°C				Lysates storage 72 H at 4°C				
								MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Confirmation Protocol 1 (BPW 37°C)		Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	
			RVS broth		MKTTn broth		Result		RVS broth		MKTTn broth		Latex	Tests ref (API/Aggl)	Confir-mation	Protocol 1 (ISO 6579)	Latex test											
			XLD	ASAP	XLD	ASAP			XLD	ASAP	XLD	ASAP																
4135	Vanilla ice cream	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4136	Nougat ice cream	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
4255	**Pasteurised milk cheese**	-	-	-	-	-	-	-	-	-	-	-	/	/	-	/	/	-	**NA**									2
4256	**Pasteurised milk cheese**	+	+m	+M	+m	+M	+	-	-	-	-	-	/	/	-	/	/	-	**ND**	-	-	-	**ND**	-	-	-	**ND**	2
4257	**Pasteurised milk cheese**	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**									2
4258	**Dairy based dessert (Tiramisu)**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**									1
4259	**Panna cotta**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**									1
4260	**Dairy based dessert**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**									1
4261	**Dairy based dessert**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**									1
4262	**Dairy based dessert**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
4263	**Dairy based dessert (cream mousse)**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**									1
4390	**Pasteurised milk cheese**	+	+M	+p	+M	+M	+	+	+M	+p	+M	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
4391	**Pasteurised milk cheese**	+	+M	+M	+M	+M	+	+	+M	+m	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
4392	**Pasteurised milk cheese**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
4393	**Pasteurised milk cheese**	+	+M	+p	+1/2	+M	+	-	-	+p	+M	+p	+	+	+	/	/	-	**ND**	-	+	-	**ND**	-	+	-	**ND**	2
4498	**Raw milk cheese**	+	+m ni/	+M	+m ni/	+M	+	+	+m	+M	+m	+M	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
4499	**Raw milk cheese**	+	+m ni/	+M	+M	+M	+	+	+m ni/+	+M	+M	+M	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2

EGG PRODUCTS

N° Sample	Product	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																				Protocol
								18 H at 37°C or 41,5°C											BPW storage 72 H at 4°C				Lysates storage 72 H at 4°C				
			RVS broth		MKTTn broth		Result	MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Confirmation Protocol 1 (BPW 37°C)		Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	
			XLD	ASAP	XLD	ASAP			RVS broth		MKTTn broth		Latex	Tests ref (API/Aggl)	Confir-mation	Protocol 1 (ISO 6579)	Latex test											
									XLD	ASAP	XLD	ASAP																
2955	**Egg yolk powder**	+	+p	+p	+p	+p	+	-	st	st	st	st	/	/	-	/	/	-	**ND**	-	-	-	**ND**	-	-	-	**ND**	2
2956	**Whole egg powder**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2957	**White egg powder**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2958	**Egg yolk powder**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2959	**White egg powder**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2960	**Whole egg powder**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2961	**White egg powder**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2962	**Whole egg powder**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2963	**White egg powder**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2964	**Whole egg powder**	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	**/**	/	/	/	**/**	2
3212	**Pasteurized white egg product**	+	+M	+M	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3213	**Pasteurized white egg product**	+	+M	+M	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3214	**Pasteurized egg yolk product**	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	**/**	/	/	/	**/**	1
3215	**Pasteurized white egg product**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3216	**Pasteurized egg yolk product**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3217	**Fresh english cream**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3218	**English cream**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3219	**Egg cream**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3220	**Cooked custard with apples**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3221	**Flotting island with english cream**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3222	**Mayonnaise**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3223	**Mayonnaise with lemon**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3224	**Mayonnaise**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3225	**Mayonnaise**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3226	**Mayonnaise**	+	+p	+p	+p	+p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3227	Egg yolk powder	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	**/**	/	/	/	**/**	2
3228	Whole egg powder	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	**/**	/	/	/	**/**	2
3229	Egg yolk powder	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	**/**	/	/	/	**/**	2
3230	Whole egg powder	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	**/**	/	/	/	**/**	2
3231	White egg powder	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	**/**	/	/	/	**/**	2
3698	Pasteurized white liquid	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	**/**	1

♦ Analysis performed according to the COFRAC accreditation

EGG PRODUCTS

N° Sample	Product	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																				Protocol
								18 H at 37°C or 41,5°C											BPW storage 72 H at 4°C				Lysates storage 72 H at 4°C				
			RVS broth		MKTTn broth		Result	MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Confirmation Protocol 1 (BPW 37°C)		Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	MDS detection result	Confir-mation	Final result	Agreement/ ISO 6579	
									RVS broth		MKTTn broth		Latex	Tests ref (API/Aggl)	Confir-mation	Protocol 1 (ISO 6579)	Latex test											
			XLD	ASAP	XLD	ASAP			XLD	ASAP	XLD	ASAP																
	egg product																											
3699	Pasteurized white liquid egg product	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3700	Pasteurized white liquid egg product	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3701	Flotting island with english cream	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3702	Cooked custard apple/caramel	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3703	Cooked custard apple	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3704	Cooked custard	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3705	Cooked custard with caramel	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3706	Cooked custard	-	st	st	-	-	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3707	English cream	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3708	English cream	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3709	Mayonnaise	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3710	Mayonnaise	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3788	Pasteurized whole egg powder	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3789	Egg whitepowder	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3790	Whole egg powder	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3791	Egg yolk powder	-	st	st	st	st	-	-	st	st	st	st	/	/	-	/	/	-	**NA**	/	/	/	/	/	/	/	/	2
3792	Liquid egg white product	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3793	Liquid egg yolk product	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3794	Whole egg product	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3795	Whole egg product	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3852	**Raw white egg product**	+	+ p	+ p	+ p	+ p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3853	**Raw egg yolk product**	+	+ p	+ p	+ p	+ p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3854	**Raw whole egg product**	+	+ p	+ p	+ p	+ p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3855	**Raw egg white product**	+	+ p	+ p	+ p	+ p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3856	**Raw egg yolk product**	+	+ p	+ p	+ p	+ p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3857	**Raw whole egg product**	+	+ p	+ p	+ p	+ p	+	+	/	/	/	/	/	/	/	+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3868	**Egg yolk powder**	+	+p	+p	+p	+p	+	+	+ p	+ p	+ p	+ p	+	+	+	/	/	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
3887	Whole egg product	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1
3888	Whole egg product	-	st	st	st	st	-	-	/	/	/	/	/	/	/	-	/	-	**NA**	/	/	/	/	/	/	/	/	1

SEAFOOD AND VEGETABLES

N° Sample	Products	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																				Protocol
								18H at 37°C or 41,5°C												BPW storage 18H at 37°C or 41,5°C +72H at 4°C				Lysates storage 72H at 4°C				
								MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Confirmation Protocol 1 (BPW 37°c)		Final result	Agreement /ISO 6579	MDS detection result	Confirmation	Final result	Agreement /ISO 6579	MDS detection result	Confirmation	Final result	Agreement /ISO 6579	
			RVS broth		MKTTn broth		Result		RVS broth		MKTTn broth		Latex	Tests ref (API/Aggl)	Confirmation	Protocol 1 (ISO 6579)	Latex test											
			XLD	ASAP	XLD	ASAP			XLD	ASAP	XLD	ASAP																
2853	**Deli salad(pine apple, surimi)**	+	+p	+p	+p	+M	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
2854	**Pasta with surimi**	+	+p	+p	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
2865	**Shrimps**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+			+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2866	**Crayfish**	+	+M	+p	+M	+p	+	+	+M	+p	+M	+p	+	+	+			+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2867	**Prawns**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+			+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2868	**Fresh salmon**	+	+M	+p	+M	+M	+	+	+M	+p	+M	+M	+	+	+			+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2869	**Whiting fillet**	+	+p	+p	+M	+p	+	+	+p	+p	+M	+p	+	+	+			+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
2870	**Sandwich(tuna, vegetables)**	+	+M	+M	+M	+1/2	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
2871	**Sandwich(salmon, vegetables)**	+	+p	+p	+M	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
2872	**Sandwich(salmon)**	+	+1/2	+1/2	+m	+m	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3501	**Frozen mushrooms**	+	+m	+m	+m	+m	+	+	+m	+m	+m	+m	+	+	+			+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
3502	**Frozen peas**	+	+m	+m	+m	+m	+	-	-	-	+1/2	-	-	-(Citrobacter)	-			-	**ND**	-	-	-	**ND**	-	-	-	**ND**	2
3503	**Frozen zucchini**	+	+m	+m	+m	+m	+	+	+m	+m	+m	+m	+	+	+			+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
3504	**Frozen beans**	+	+1/2	+m	+1col	+m	+	+	+m	+m	+m	+m	+	+	+			+	**PA**	+	+	+	**PA**	+	+	+	**PA**	2
3505	**Frozen beans**	+	-	-	-	-	-	+	+m	+m	+m	+m	+	+	+			+	**PD**	+	+	+	**PD**	+	+	+	**PD**	2
3506	Frozen vegetable patties	-	-	-	-	-	-	-								-		-	**NA**									1
3507	Cod	-	st	st	-	-	-	-	-	-	-	-			-			-	**NA**									2
3508	**Vegetable tortilla with cheese**	+	+p	+p	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3509	**Tomato and mozzarella salad**	+	+p	+p	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3510	**Vegetables and egg salad**	+	+M	+M	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3511	**Celery salad**	+	+M	+M	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3512	**Carrots salad**	+	+M	+M	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3513	**Poultry and vegetables crumble**	+	+p	+p	+p	+p	+	-/- /-								+	+	-	**ND**	+	+	+	**PA**	-	+	-	**ND**	1
3514	**Vegetables couscous**	+	+p	+p	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3515	**Beans, carrots, broccoli**	+	+p	+p	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3516	**Salmon and scallops gratin**	+	+p	+p	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3517	**Cod pie**	+	+p	+p	+p	+p	+	+								+	+	+	**PA**	+	+	+	**PA**	+	+	+	**PA**	1
3711	Mixed vegetable salad	-	-	-	-	-	-	-								-		-	**NA**									1
3712	Sandwich vegetable/cheese	-	-	-	st	st	-	-								-		-	**NA**									1
3713	Sandwich tomato/tunny	-	-	-	+/- ni /-	-	-	-								-		-	**NA**									1

♦ Analysis performed according to the COFRAC accreditation

SEAFOOD AND VEGETABLES

N° Sample	Products	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																			Protocol
								18H at 37°C or 41,5°C											BPW storage 18H at 37°C or 41,5°C +72H at 4°C				Lysates storage 72H at 4°C				
			RVS broth		MKTTn broth		Result	MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Confirmation Protocol 1 (BPW 37°c)		Final result	Agreement /ISO 6579	MDS detection result	Confirmation	Final result	Agreement /ISO 6579	MDS detection result	Confirmation	Final result	Agreement /ISO 6579	
			XLD	ASAP	XLD	ASAP			XLD	ASAP	XLD	ASAP	Latex	Tests ref (API/Aggl)	Confirmation	Protocol 1 (ISO 6579)	Latex test											
3714	Sandwich salmon	-	-	-	-	-	-	-								-		-	NA								1
3715	Sandwich egg/tunny	-	-	-	-	-	-	-								-		-	NA								1
3716	Sandwich tunny	-	+/- ni /-	-	+/- ni (2) /-	-	-	-								-		-	NA								1
3717	Sandwich salmon/tomato/asparagus	-	-	-	-	-	-	-								-		-	NA								1
3747	**Cooked sandwich ham/cheese**	+	+ m ni / +	+ p	+ m	+ p	+	+								+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3756	**Fish pie**	+	+ p	+ p	+ p	+ p	+	+								+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3757	**Cooked meat tomatoes**	-	st	st	st	st	-	-								-		-	NA								1
3758	**Cooked sandwich tomato/sweet pepper**	-	st	st	st	st	-	-								-		-	NA								1
3849	**Endive in the browned ham**	+	+ p	+ p	+ p	+ p	+	+								+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3850	**Nems with crab**	+	+ p	+ p	+ p	+ p	+	+								+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3851	**Ready to eat scallops**	+	+ M	+ M	+ M	+ M	+	+								+	+	+	PA	+	+	+	PA	+	+	+	PA	1
3877	Ready to eat fish	-	-	-	-	-	-	-								-		-	NA								1
3878	Ready to eat fish	-	-	-	-	-	-	-								-		-	NA								1
3879	Ready to eat fish	-	st	st	st	st	-	-								-		-	NA								1
3880	Ready to eat scallops	-	st	st	st	st	-	-								-		-	NA								1
3881	Grilled fish fillets	-	-	-	-	-	-	-								-		-	NA								1
3882	Roasted fish	-	-	-	-	-	-	-								-		-	NA								1
3883	Seafood product	-	+/- ni/-	-	-	-	-	-	-	-	-	-						-	NA								2
3884	**Deli salad(cheese,ham, vegetables)**	+	+m	+M	+M	+ M	+	-/-/-/-/-								+	+	-	ND	+	+	+	PA	-/-	+	-	ND	1
3885	**Deli salad (pasta, vegetables)**	-	-	-	-	-	-	-								-		-	NA								1
3886	**Deli salad(vegetables mix)**	-	st	st	st	st	-	-								-		-	NA								1
3985	Vegetables for couscous	-	-	-	-	-	-	-								-		-	NA								1
3987	Pollack fillet	-	-	-	-	-	-	-	-	-	-	-						-	NA								2
3988	Herring fillet	-	-	-	-	-	-	-	-	-	-	-						-	NA								2
3989	Salmon	-	-	-	-	-	-	-	-	-	-	-						-	NA								2
3990	Coley fillet	-	-	-	-	-	-	-	-	-	-	-						-	NA								2
3991	Salmon	-	-	-	-	-	-	-	-	-	-	-						-	NA								2
3992	Lettuce	-	-	-	-	-	-	-	-	-	-	-						-	NA								2
3993	Batavia	-	-	-	-	-	-	-	-	-	+/-m	-	-	Citro.youngae	-			-	NA								2
3994	Salad	-	-	-	+/-m(Citro. Youngae)	-	-	-	-	-	+/-M	-	-	Citro.youngae	-			-	NA								2
3995	Zucchini	-	-	-	+/- m(Citro.youngae)	-	-	-	-	-	+/- m/+	-	-	Citro.youngae	-			-	NA								2

ENVIRONMENTAL SAMPLES

N° Sample	Products	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																		Protocol
								18H at 37°C or 41,5°C										BPW storage 18H at 37°c or 41,5°C +72H at 4°C				Lysates storage 72H at 4°C				
								MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Final result	Agreement /ISO 6579	MDS detection result	Confirmation	Final result	Agreement /ISO 6579	MDS detection result	Confirmation	Final result	Agreement /ISO 6579	
			RVS broth		MKTTn broth		Result		RVS broth		MKTTn broth		Latex	Tests ref (API/Aggl)	Confirmation											
			XLD	ASAP	XLD	ASAP			XLD	ASAP	XLD	ASAP														
5281	Wipe	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5282	Wipe	-	-	-	-	-	-	-	st	st	st	st	/	/	-	-	NA									2
5283	Wipe	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5284	Wipe	-	st	st	st	st	-	-	st	st	-	-	/	/	-	-	NA	-	-	-	NA	-	-	-	NA	2
5285	**Wipe**	+	+m	+m	+m	+m	+	+	+M	+p	+p	+p	+	+	+	+	PA	+	+	+	PA	+	+	+	PA	2
5286	**Wipe**	+	+p	+p	+m	+p	+	+	+p	+p	+p	+p	+	+	+	+	PA	+	+	+	PA	+	+	+	PA	2
5287	**Wipe**	+	+m	+1/2	+m	+m	+	-/-/-	+M	+m	+m	+M	+	+	+	-	ND	-/+/+	+	-	ND	-	+	-	ND	2
5288	**Wipe**	+	+p	+p	+p	p	+	+	+p	+p	+p	+p	+	+	+	+	PA	+	+	+	PA	+	+	+	PA	2
5289	**Process water**	+	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	+	PA	+	+	+	PA	+	+	+	PA	2
5290	**Process water**	+	+p	+p	+M	+p	+	+	+M	+p	+M	+M	+	+	+	+	PA	+	+	+	PA	+	+	+	PA	2
5291	Process water	-	st	st	st	st	-	-	st	st	st	st	/	/	-	-	NA	-	-	-	NA	-	-	-	NA	2
5292	Process water	-	-	-	-	-	-	+/+/-	-	-	-	-	/	/	-	-	PPNA									2
5293	Wipe	+	+m	+m	-	+m	+	+	+m	+1/2	-	+m	+	+	+	+	PA	+	+	+	PA	+	+	+	PA	2
5294	Wipe	-	-	-	-	+/- m(NC)	-	-	-	-	-	-	/	/	-	-	NA									2
5295	Wipe	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5296	Wipe	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5417	Wipe	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5418	Wipe	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5419	Wipe	-	-	-	-	-	-	-	st	st	st	st	/	/	-	-	NA									2
5420	Wipe	-	st	st	st	st	-	-	st	st	st	st	/	/	-	-	NA									2
5421	Process water	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5422	Process water	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5423	Process water	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5424	Process water	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5425	Process water	-	st	st	st	st	-	-	st	st	st	st	/	/	-	-	NA									2
5426	Process water	-	st	st	st	st	-	-	st	st	st	st	/	/	-	-	NA									2
5427	Process water	-	st	st	st	st	-	-	st	st	st	st	/	/	-	-	NA									2
5428	**Wipe**	-	-	-	-	-	-	-	-	-	-	-	/	/	-	-	NA									2
5429	**Wipe**	-	st	st	st	st	-	-	st	st	st	st	/	/	-	-	NA									2
5430	**Process water**	+	+m	+m	+m	+m	+	+	+M	+M	+m	+M	+	+	+	+	PA	-/-/-	+	-	ND	-	+	-	ND	2
5431	**Process water**	+	+m	+m	-	+M	+	+	+M	+M	+m	+M	+	+	+	+	PA	-/-/-	+	-	ND	-	+	-	ND	2
5432	**Process water**	+	+m	+m	+M	+M	+	+	+M	+M	+M	+M	+	+	+	+	PA	+	+	+	PA	+	+	+	PA	2
5433	**Process water**	+	+M	+M	+M	+M	+	+	+M	+M	+M	+M	+	+	+	+	PA	+	+	+	PA	+	+	+	PA	2

♦ Analysis performed according to the COFRAC accreditation

ENVIRONMENTAL SAMPLES

N° Sample	Products	Global result	ISO 6579 Reference method♦					3M™ Molecular detection Assay *Salmonella* method																		Protocol
								18H at 37°C or 41,5°C									BPW storage 18H at 37°c or 41,5°C +72H at 4°C				Lysates storage 72H at 4°C				
			RVS broth		MKTTn broth		Result	MDS detection result	Confirmatory tests for protocol 2 (Prewarmed BPW 41,5°c)							Final result	Agreement /ISO 6579	MDS detection result	Confirmation	Final result	Agreement /ISO 6579	MDS detection result	Confirmation	Final result	Agreement /ISO 6579	
			XLD	ASAP	XLD	ASAP			RVS broth XLD	RVS broth ASAP	MKTTn broth XLD	MKTTn broth ASAP	Latex	Tests ref (API/Aggl)	Confirmation											
5434	**Process water**	**+**	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5435	**Process water**	**+**	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5436	**Process water**	**+**	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5620	**Process water**	**+**	+M	+M	+m	+m	+	+	+M	+M	+M	+M	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5621	**Process water**	**-**	-	-	-	-	-	+/+/+	-	-	-	-	-	-	-	**-**	**PPNA**	-	-	**-**	**NA**	+	-	**-**	**NA**	2
5622	**Process water**	**+**	+p	+p	+p	+p	+	+	+p	+p	+M	+p	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5623	**Process water**	**+**	+M	+M	+m	+m	+	+	+M	+M	+m	+M	+	+	+	**+**	**PA**	-/+/+	+	**-**	**ND**	+	+	**+**	**PA**	2
5624	**Process water**	**-**	-	-	-	-	-	-	-	-	-	-	/	/	-	**-**	**NA**				**0**				**0**	2
5625	**Wipe**	**+**	+M	+M	-	+M	+	+	+M	+p	+p	+M	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5626	**Wipe**	**+**	+M	+p	+M	+M	+	-	-	-	-	-	/	/	-	**-**	**ND**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5627	**Wipe**	**+**	+M	+p	+M	+M	+	-	-	-	-	-	/	/	-	**-**	**ND**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5628	**Wipe**	**+**	+M	+M	+M	+M	+	+	+M	+M	+M	+M	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5629	**Wipe**	**+**	+M	+M	+m	+m	+	+	+M	+M	+M	+M	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5630	**Wipe**	**+**	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5631	**Wipe**	**+**	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5632	**Dusts**	**+**	+M	+p	+m	+p	+	+	+p	+p	+p	+p	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5633	**Dusts**	**+**	+p	+p	+p	+p	+	+	+p	+p	+p	+p	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5634	**Dusts**	**-**	-	-	-	-	-	-	st	st	st	st	/	/	-	**-**	**NA**				**0**				**0**	2
5650	**Dusts**	**+**	+1/2	-	+/-m/-	-	+	+	+/-1/2/+	+/-ni	+/-m/-	-	+	+	+	**+**	**PA**	+	+	**+**	**PA**	-/-/-	+	**-**	**ND**	2
5651	**Dusts**	**+**	+m	-	+1/2	-	+	+	+1/2	-	+M	-	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5652	**Dusts**	**+**	+m	+/-m/-	+1/2	-	+	+	+m	+/-m/-	+1/2	-	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5653	**Dusts**	**+**	-	+/-m/-	-	-	-	+	-	-	+/-m/-	-	/	/	+(5RVS/5MKttn: 1col + on RX)	**+**	**PD**	+	-(5MSRV)	**-**	**NA**	+	-(5MSRV)	**-**	**NA**	2
5654	**Dusts**	**+**	+M	+p	+m	+p	+	+	+M	+p	+M	+p	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5655	**Dusts**	**+**	+m	+M	+M	+M	+	+	+M	+M	+M	+M	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5656	**Dusts**	**+**	+m	+M	+M	+M	+	+	+m	+M	+M	+M	+	+	+	**+**	**PA**	+	+	**+**	**PA**	+	+	**+**	**PA**	2
5657	Dusts	**-**	-	-	-	-	-	-	-	-	-	-	/	/	-	**-**	**NA**								**0**	2
5658	Dusts	**-**	-	-	-	-	-	-	-	-	-	-	/	/	-	**-**	**NA**								**0**	2
5659	Dusts	**-**	st	st	st	st	-	-	st	st	st	st	/	/	-	**-**	**NA**								**0**	2
5660	Dusts	**-**	-	-	-	-	-	-	+/-1/2/-	-	-	-	/	/	-	**-**	**NA**								**0**	2
5661	Dusts	**-**	-	+/-2col	-	-	-	-		+/-3col	-	-	/	/	-	**-**	**NA**								**0**	2
5799	Rinsing water	**-**	st	st	st	st	-	-	st	st	st	st	/	/	-	**-**	**NA**								**0**	2
5800	Rinsing water	**-**	-	-	-	-	-	-	st	st	st	st	/	/	-	**-**	**NA**								**0**	2

SPICES AND AROMATIC HERBS																												
N° Sample	Product (French name)	Product (English name)	Global result Protocol 5	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																		
									Protocol 5 - 18H at 37°C									Protocol 5 - 18H at 37°C + 72H 4°C									
				RVS broth		MKTTn broth		Final result	MDS detection result 10µl lysis/20µl MDS	MC	Confirmatory tests					Final result (10µl)	Agreement /ISO 6579	Lysate storage		BPW storage		Confirmation	Final result		Agreement/ISO 6579	
				XLD	ASAP	XLD	ASAP				RVS/ XLD	RVS/ ASAP	Latex	Tests ref (API/Aggl)	Confir-mation			MDS	MC	MDS	MC		Lysate storage	BPW storage	Lysate storage	BPW storage
4865	**Persil déshydratée**	**Dehydrated parsley**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4866	**Herbes de Provence déshydratées**	**Dehydrated herbs**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4867	**Fenouil déshydraté**	**Dehydrated fennel**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4868	**Origan déshydraté**	**Dehydrated oregano**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4869	**Marjolaine déshydratée**	**Dehydrated marjoram**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4870	**Aneth déshydraté**	**Dehydrated dill**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4871	Genièvre	**Juniper**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4872	**Cannelle moulue**	**Ground cinnamon**	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	+	**PD**	+	+	+	+	+	+	+	**PD**	**PD**
4873	**Muscade moulue**	**Ground nutmeg**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4874	**Gingembre moulu**	**Ground ginger**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4875	**Curcuma**	**Turmeric**	**-**	-	-	-	-	-	-	+	-	-	/	/	-	-	**NA**									
4876	**Paprika doux**	**Soft paprika**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4877	**Cumin moulu**	**Ground cumin**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4878	**Epices pour paella**	**Spices for paella**	**-**	st	st	-	st	-	-	+	-	-	/	/	-	-	**NA**									
4879	**4 épices**	**Four spices mix**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4880	**Coriandre moulue**	**Ground coriander**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4881	Piment d'Espelette	Espelette spice	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4882	Baies roses	Pink berries	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4883	Poivre blanc en graines	White pepper seeds	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4980	**Cannelle moulue**	**Ground cinnamon**	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	+	**PD**	+	+	+	+	+	+	+	**PD**	**PD**
4981	**Epices pour tajine**	**Spices for tagine**	**-**	-	-	st	st	-	-	+	-	-	/	/	-	-	**NA**									
4982	**Curry en poudre**	**Curry**	**-**	st	st	st	st	-	-	+	-	-	/	/	-	-	**NA**									
4983	**Piment en poudre**	**Spice**	**-**	-	-	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4984	**Poivre gris moulu**	**Ground grey pepper**	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	+	**PD**	+	+	+	+	+	+	+	**PD**	**PD**
5130	**Romarin déshydraté**	**Dehydrated rosemary**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5131	**Basilic feuilles**	**Dehydrated basil leaves**	**-**	st	st	st	st	-	i/i*/-** (-)	i/i*/+**	st	st	/	/	-	-	**NA**									
5132	**Epices pour riz parfumé**	**Spices for rice**	**-**	st	st	st	st	-	-	+	-	-	/	/	-	-	**NA**									
5133	**Raz El Hanout**	**Raz El Hanout**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5134	**Epices mexicaines**	**Mexican spices**	**+**	st	st	st	st	-	+	+	+m	+M	+	+	+	+	**PD**	+	+	+	+	+	+	+	**PD**	**PD**
5513	**Epices orientales**	**Oriental spices**	**-**	-	-	-	-	-	-	+	-	-	/	/	-	-	**NA**									
5514	**Epices orientales**	**Oriental spices**	**-**	-	-	-	-	-	-	+	st	st	/	/	-	-	**NA**									
99	**Echalotes lanières déshydratées**	**Dehydrated sliced shallots**	**-**	-	-	-	-	-	-	+	st	st	/	/	-	-	**NA**									
100	**Oignons lanières déshydratés**	**Dehydrated sliced onions**	**-**	-	-	-	-	-	-/-/-	+	+M	+M	+	+	+	-	**NA**	-	+	-	+	-	-	-	**NA**	**NA**

♦ Analyses performed according to the COFRAC accreditation

SPICES AND AROMATIC HERBS

N° Sample	Product (French name)	Product (English name)	Global result Protocol 5	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																
									Protocol 5 - 18H at 37°C									Protocol 5 - 18H at 37°C + 72H 4°C								
				RVS broth		MKTTn broth		Final result	MDS detection result 10µl lysis/20µl MDS	MC	Confirmatory tests					Final result (10µl)	Agreement /ISO 6579	Lysate storage		BPW storage		Confirmation	Final result		Agreement/ISO 6579	
				XLD	ASAP	XLD	ASAP				RVS/ XLD	RVS/ ASAP	Latex	Tests ref (API/Aggl)	Confir-mation			MDS	MC	MDS	MC		Lysate storage	BPW storage	Lysate storage	BPW storage
102	Ail semoule	Garlic	+	+1/2	+1/2	+M	+M	+	+	+	+m	+m	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
104	Fenouil déshydraté	Dehydrated fennel	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
350	Curry hot	Hot curry	+	-	-	-	-	-	+	+	+M	+p	+	+	+	+	PD	+	+	+	+	+ (MSRV/ XLD-ASAP)	+	+	PD	PD
351	Curcuma	Turmeric	-	-	-	-	-	-	-	+	-	-	/	/	-	-	NA									
437	Ail semoule	Garlic	+	+m	+1/2	+m	+m	+	+	+	+M	+M	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
438	Oignons lanières déshydratés	Dehydrated sliced onions	+	-	-	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
439	Echalotes lanières déshydratées	Dehydrated sliced shallots	+	st	st	st	st	-	+	+	+M	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
440	Echalotes déshydratées	Dehydrated shallots	+	st	st	+p (ox+)	+pd (ox+)	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
441	Romarin déshydraté	Dehydrated rosemary	+	+p	+p	+p	+pd	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
442	Thym	Thyme	-	st	st	st	st	-	-	+	st	st	/	/	/	-	NA									
443	Basilic feuilles	Dehydrated basil leaves	+	+p	+p	+p	+pd	+	-	+	st	st	/	/	/	-	ND	-	+	-	+	-	-	-	ND	ND
444	Epices mexicaines	Mexican spices	-	-	-	-	-	-	-	+	-	-	/	/	/	-	NA									
445	Epices paella	Spices for paella	-	-	-	st	st	-	-	+	-	-	/	/	/	-	NA									
534	Thym	Thyme	-	st	st	st	st	-	-	+	st	st	/	/	/	-	NA									
535	Herbes de Provence déshydratées	Dehydrated herbs (provence)	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
536	Persil déshydraté	Dehydrated parsley	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
537	Fines herbes	Chive	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
538	Origan déshydraté	Dehydrated oregano	-	st	st	st	st	-	-	+	st	st	/	/	/	-	NA									
539	Bouquet garni déshydraté	Mix of dehydrated aromatic herbs	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
540	Laurier déshydraté	Laurier	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
541	Thym	Thyme	-	st	st	st	st	-	-	+	st	st	/	/	/	-	NA									
542	Oignons lanières déshydratés	Dehydrated sliced onions	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
543	Oignons rissolés	Dehydrated fried onions	+	+m	+m	+m	+m	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
544	Echalotes déshydratées	Dehydrated shallots	+	+M	+M	+M	+M	+	+	+	+m	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
545	Echalotes cassettes	Shallots	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
546	Ail semoule	Garlic	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
673	Origan déshydraté	Dehydrated oregano	-	st	st	st	st	-	-/+/+	+	+p	+p	+	+	+	-	NA	+	+	+	+	+	+	+	PD	PD
674	Romarin déshydraté	Dehydrated rosemary	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
675	Basilic feuilles déshydraté	Dehydrated basil leaves	-	st	st	st	st	-	-	+	-	-	/	/	/	-	NA									
676	Thym	Thyme	+	+p	+p	+p	+p	+	-	+	st	st				-	ND	-	+	-	+	-	-	-	ND	ND
677	Fines herbes	Chive	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
678	Epices guacamole	Spices for guacamole	-	st	st	st	st	-	-	+	st	st	/	/	/	-	NA									
679	Epices chili mexicain	Spices for chili	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
680	Epices tagine marocaine	Spices for tagine	-	st	st	st	st	-	-	+	st	st	/	/	/	-	NA									

SPICES AND AROMATIC HERBS																											
N° Sample	Product (French name)	Product (English name)	Global result Protocol 5	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																		
									Protocol 5 - 18H at 37°C									Protocol 5 - 18H at 37°C + 72H 4°C									
				RVS broth		MKTTn broth		Final result	MDS detection result 10µl lysis/20µl MDS	MC	Confirmatory tests					Final result (10µl)	Agreement /ISO 6579	Lysate storage		BPW storage		Confirmation	Final result		Agreement/ISO 6579	
				XLD	ASAP	XLD	ASAP				RVS/ XLD	RVS/ ASAP	Latex	Tests ref (API/Aggl)	Confir-mation			MDS	MC	MDS	MC		Lysate storage	BPW storage	Lysate storage	BPW storage
681	**Epices poulet tandori**	**Spices for tandori chicken**	-	st	st	st	st	-	-	+	st	st	/	/	/	-	**NA**									
682	**Epices paella**	**Spices for paella**	+	-	-	-	-	-	+	+	+p	+p	+	+	+	+	**PD**	+	+	+	+	+	**+**	**+**	**PD**	**PD**
683	**Epices couscous**	**Spices for couscous**	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	**+**	**+**	**PA**	**PA**
684	**Epices colombo**	**Spices for colombo**	+	-	-	st	st	-	+	+	+m	+1/2	+	+	+	+	**PD**	+	+	+	+	+	**+**	**+**	**PD**	**PD**
685	**Cannelle moulue**	**Ground cinnamon**	+	+p	+p	+p	+p	+	+	+	+1/2	+M	+	+	+	+	**PA**	+	+	+	+	+	**+**	**+**	**PA**	**PA**

Bold typing: artificial contaminations NC: non characteristic colonies on nutrient agar +/-: doubtful colonies ox: oxidase test ni: non isolated colonies *: 1/2 dilution applied on BPW before lysis step
st: plate without colonies +1/2:50% target +m:minority of target bacteria +M:majority of target bacteria p: culture **: 1/5 dilution applied on BPW before lysis step
( ) Result without taking into account the Matrix Control

CONCENTRATES AND CULINALRY PRODUCTS, TEA, COFFEE

N° Sample	Product (French name)	Product (English name)	Global result Protocol 6	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																
									Protocol 6 - 18H at 37°C									Protocol 6 - 18H at 37°C + 72H at 4°C								
											Confirmatory tests							Lysate storage		BPW storage			Final result		Agreement/ISO 6579	
				RVS broth		MKTTn broth		Final result	MDS	MC	RVS/ XLD	RVS/ ASAP	Latex	Tests ref (API/Aggl)	Confir-mation	Final result	Agreement/ ISO 6579	MDS	MC	MDS	MC	Confir-mation	Lysate storage	BPW storage	Lysate storage	BPW storage
				XLD	ASAP	XLD	ASAP																			
4196	**Fond de veau**	**Culinary product (veal)**	+	-	-	-	-	-	+	+	+m	+m	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
4197	**Jus de roti**	**Culinary product (beef)**	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
4198	**Bouillon de volaille**	**Culinary product (poultry)**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
4199	**Fond de volaille**	**Culinary product (poultry)**	+	+p	+p	+p	+p	+	-/i/- (-)	+/i/-	+p	+p	+	+	+	-	ND	-	+	-	+	+	-	-	ND	ND
4201	**Infusion**	**Instant infusion**	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	-/-/-	+	+	+	+	-	+	NA	PD
4202	**Infusion aux 5 plantes**	**Instant infusion**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
4203	**Café soluble**	**Instant coffee**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
4205	**Café soluble**	**Instant coffee**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5135	Café soluble	Instant coffee	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5136	Café soluble	Instant coffee	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5137	Infusion aux 5 plantes	Instant infusion	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5138	Infusion	Instant infusion	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5139	**Fond de veau**	**Culinary product (veal)**	+	-	-	st	st	-	+	+	+M	+M	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
5140	Fumet de poisson	Culinary product (fish)	-	-	-	-	-	-	-	+	-	-	/	/	-	-	NA									
5141	**Fumet de poisson**	**Culinary product (fish)**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5142	**Fond pour rôtis**	**Culinary product (beef)**	-	-	-	-	-	-	-		-	-	/	/	-	-	NA									
5143	**Fond de veau**	**Culinary product (veal)**	+	+m	+m	st	st	+	-	+	-	-	/	/	-	-	ND	-	+	-	+	-	-	-	ND	ND
5144	**Cœur de bouillon**	**Culinary product (beef)**	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
5145	**Cœur de bouillon de bœuf**	**Culinary product (beef)**	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
5146	**Fond de veau**	**Culinary product (veal)**	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
5692	**Court bouillon au poisson et au citron (cube)**	**Culinary product (fish)**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5693	**Cœur de bouillon façon pot-au -feu**	**Culinary product (beef)**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5694	**Bouillon pot-au-feu (cube)**	**Culinary product (beef)**	-	-	st	st	st	-	-	+	-	-	/	/	-	-	NA									
5695	**Bouillon de poule**	**Culinary product (poultry)**	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
5696	**Marmite de bouillon**	**Culinary product (beef)**	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
5697	Bouquet garni	Culinary product (vegetables)	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5698	Cœur de bouillon légumes	Culinary product (vegetables)	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5699	Cœur de bouillon Ail, persil	Culinary product (vegetables)	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5700	**Bouillon de boeuf**	**Culinary product (beef)**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5701	**Bouillon cube**	**Culinary product (beef)**	-	st	st	st	st	-	-	+	-	-	/	/	-	-	NA									
5702	**Concenté liquide**	**Concentrate**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5703	**Sauce yakitori**	**Culinary product (vegetables)**	-	st	st	st	st	-	-	+	+p	+p	+	+	+	-	NA	-	+	+	+	+	-	+	NA	PD
5704	**Arome saveur**	**Culinary product (beef)**	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5705	Sauce soja	Culinary product (vegetables)	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									

♦ Analyses performed according to the COFRAC accreditation

CONCENTRATES AND CULINALRY PRODUCTS, TEA, COFFEE

N° Sample	Product (French name)	Product (English name)	Global result Protocol 6	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																
									Protocol 6 - 18H at 37°C									Protocol 6 - 18H at 37°C + 72H at 4°C								
											Confirmatory tests							Lysate storage		BPW storage			Final result		Agreement/ISO 6579	
				RVS broth		MKTTn broth		Final result	MDS	MC	RVS/ XLD	RVS/ ASAP	Latex	Tests ref (API/Aggl)	Confir-mation	Final result	Agreement/ ISO 6579	MDS	MC	MDS	MC	Confir-mation	Lysate storage	BPW storage	Lysate storage	BPW storage
				XLD	ASAP	XLD	ASAP																			
5706	**Sauce Nuoc mam**	**Culinary product (fish)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
13	**Thé lyophilisé**	**Instant tea**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
14	**Thé aromatisé citron lyophilisé**	**Instant tea**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
15	**Café soluble**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
16	**Café décaféiné soluble**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
17	**Café soluble**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
18	**Thé lyophilisé**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
19	**Thé aromatisé citron lyophilisé**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
20	**Café soluble**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
21	**Café décaféiné soluble**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
22	**Café soluble**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
23	**Thé lyophilisé**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
24	**Thé aromatisé citron lyophilisé**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
431	**Thé instantané**	**Instant coffee**	**-**	st	st	st	st	-	-/-/+	+	+p	+p	+	+	+	**-**	**NA**	-	+	-	+	-	**-**	**-**	**NA**	**NA**
432	**Thé citron instantané**	**Instant coffee**	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	**+**	**PD**	+	+	-	+	+	**+**	**+**	**PD**	**PD**
433	**Café instantané**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
434	**Décaféiné instantané**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
519	**Concentré de porc**	**Concentrate (pork)**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	**+**	**PA**	+	+	+	+	+	**+**	**+**	**PA**	**PA**
520	**Concentré de boeuf**	**Concentrate (beef)**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	**+**	**PA**	+	+	+	+	+	**+**	**+**	**PA**	**PA**
521	**Concentré de poulet**	**Concentrate (poultry)**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	**+**	**PA**	+	+	+	+	+	**+**	**+**	**PA**	**PA**
522	**Concentré de champignon**	**Concentrate (Mushrooms)**	**-**	st	st	st	st	-	-/+/+	+	-	+p	+	+	+	**-**	**NA**	-	+	-/-/-	+	+	**-**	**-**	**NA**	**NA**
523	**Concentré d'oignon**	**Concentrate (onions)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**	-								
524	**Concentré d'ail**	**Concentrate (garlic)**	**+**	-	+p	-	+p	+	-/-/-	+	-	+p	+	+	+	**-**	**ND**	-	+	-/-/-	+	+	**-**	**-**	**ND**	**ND**
525	**Concentré de carotte**	**Concentrate (carrots)**	**+**	-	+p	-	+p	+	-	+	st	st	/	/	-	**-**	**ND**	-	+	-	+	-	**-**	**-**	**ND**	**ND**
526	**Thé instantané**	**Instant tea**	**+**	st	st	+p	+p	+	-/+/+	+	+p	+p	+	+	+	**-**	**ND**	+	+	+	+	+	**+**	**+**	**PA**	**PA**
527	**Thé instantané citron**	**Instant tea**	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	**+**	**PD**	+	+	+	+	+	**+**	**+**	**PD**	**PD**
528	**Café soluble**	**Instant coffee**	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	**+**	**PD**	+	+	+	+	+	**+**	**+**	**PD**	**PD**
529	**Café soluble**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
530	**Décaféiné**	**Instant coffee**	**+**	+p	+p	+p	+p	+	-/-/-	+	+p	+p	+	+	+	**-**	**ND**	-	+	-/+/+	+	+	**-**	**-**	**ND**	**ND**
531	**Café soluble**	**Instant coffee**	**-**	st	st	st	st	-	-/+/+	+	+p	+p	+	+	+	**-**	**NA**	-	+	-/+/-	+	+	**-**	**-**	**NA**	**NA**
532	**Café soluble**	**Instant coffee**	**-**	st	st	st	st	-	-/-/-	+	+p	+p	+	+	+	**-**	**NA**	-	+	-/+/-	+	+	**-**	**-**	**NA**	**NA**
533	**Café soluble**	**Instant coffee**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
666	Café soluble	Instant coffee	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
667	Café soluble	Instant coffee	**-**	st	st	st	st	-	-/-/-	+	+p	+p	+	+	+	**-**	**NA**	-	+	-	+	-	**-**	**-**	**NA**	**NA**
668	Café décaféiné soluble	Instant coffee	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	**+**	**PD**	-/+/-	+	+	+	+	**+**	**+**	**PD**	**PD**
669	Thé instantané	Instant tea	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	**+**	**PA**	+	+	+	+	+	**+**	**+**	**PA**	**PA**
670	Thé citron instantané	Instant tea	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	**+**	**PD**	+	+	+	+	+	**+**	**+**	**PD**	**PD**
671	Fumet de poisson	Culinary product (fish)	**+**	+p	+p	+p	+p	+	+	+	+M	+M	+	+	+	**+**	**PA**	+	+	+	+	+	**+**	**+**	**PA**	**PA**
672	Bouillon bœuf	Culinary product (beef)	**+**	st	st	st	st	+	+	+	+m	+p	+	+	+	**+**	**PA**	+	+	+	+	+	**+**	**+**	**PA**	**PA**
731	**Fumet de homard**	**Concentrate (lobster)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**									
732	**Concentré de homard**	**Concentrate (lobster)**	**-**	st	st	st	st	-	+ (curve-)	+	st	st	/	/	-	**-**	**PPNA**	-	+	-	+	-	**-**	**-**	**NA**	**NA**
733	**Concentré de poulet**	**Concentrate (roasted**	**+**	st	st	+p	+p	+	-	+	st	st	/	/	-	**-**	**ND**	-	+	-	+	-	**-**	**-**	**ND**	**ND**

CONCENTRATES AND CULINALRY PRODUCTS, TEA, COFFEE																											
N° Sample	Product (French name)	Product (English name)	Global result Protocol 6	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																		
									Protocol 6 - 18H at 37°C									Protocol 6 - 18H at 37°C + 72H at 4°C								
											Confirmatory tests							Lysate storage		BPW storage			Final result		Agreement/ISO 6579	
				RVS broth		MKTTn broth		Final result	MDS	MC	RVS/ XLD	RVS/ ASAP	Latex	Tests ref (API/Aggl)	Confir-mation	Final result	Agreement/ ISO 6579	MDS	MC	MDS	MC	Confir-mation	Lysate storage	BPW storage	Lysate storage	BPW storage
				XLD	ASAP	XLD	ASAP																				
	rôti	**chicken)**																									
734	**Demi-glace d'agneau**	**Concentrate (lamb)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**										
735	**Demi-glace de bœuf**	**Concentrate (beef)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**										
736	**Demi-glace porc jambon**	**Concentrate (pok)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	**-**	**NA**										
792	**Demi-glace d'agneau**	**Concentrate (lamb)**	**-**	st	st	st	st	-	-	+	st	st			-	**-**	**NA**										
793	**Fumet de homard**	**Concentrate (lobster)**	**-**	st	st	st	st	-	-	+	st	st			-	**-**	**NA**										
794	**Demi-glace de poisson**	**Concentrate (fish))**	**+**	+p	+p	+p	+p	+	-/-/-	+	+p	+p			+	**-**	**ND**	-	+	+	+	+	**-**	**-**	**ND**	**ND**
795	**Demi-glace homard**	**Concentrate (lobster)**	**+**	st	st	+p	+p	+	-/-/-	+	+p	+p			+	**-**	**ND**	-	+	+	+	+	**-**	**-**	**ND**	**ND**
797	**Marmite bouillon poule**	**Culinary product (hen)**	**+**	+p	+p	+p	+p	+	+	+	+p	+p			+	**+**	**PA**	+	+	+	+	+	**+**	**+**	**PA**	**PA**
798	**Sauce yakitori au poisson**	**Culinary product (fish)**	**+**	st	st	st	st	-	+	+	+p	+p			+	**+**	**PD**	+	+	+	+	+	**+**	**+**	**PD**	**PD**
799	**Viandox (boeuf)**	**Culinary product (beef)**	**-**	st	st	st	st	-	-	+	st	st			-	**-**	**NA**										
800	**Arôme bœuf**	**Culinary product (beef)**	**-**	st	st	st	st	-	-	+	st	st			-	**-**	**NA**										

Bold typing: artificial contaminations NC: non characteristic colonies on nutrient agar +/-: doubtful colonies ox: oxidase test ni: non isolated colonies *: 1/2 dilution applied on BPW before lysis step
st: plate without colonies +1/2:50% target +m:minority of target bacteria +M:majority of target bacteria p: culture **: 1/5 dilution applied on BPW before lysis step
( ) Result without taking into account the Matrix Control

COCOA AND COCOA BASED PRODUCTS

N° Sample	Product (French name)	Product (English name)	Global result Protocol 4	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																	
									Protocol 4 : UHT Milk + Brilliant Green enrichment - 24H at 37°C									Protocol 4 : UHT Milk + Brilliant Green enrichment - 24H at 37°C + 72H at 4°C								
											Confirmatory tests								Lysate storage		BPW storage			Final result		Agreement/ISO 6579	
				RVS broth		MKTTn broth		Final result	MDS	MC	RVS/XLD	RVS/ASAP	Latex	Tests ref (API/Aggl)	Confirmation	Final result	Agreement / ISO 6579	MDS	MC	MDS	MC	Confirmation	Lysate storage	BPW storage	Lysate storage	BPW storage
				XLD	ASAP	XLD	ASAP																			
4970	Chocolat noir dessert 52% (tablette)	Chocolate bar (52% cocoa)	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
4971	Chocolat noir dessert 64% (tablette)	Chocolate bar (64% cocoa)	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
4972	Chocolat à cuisiner 70% (tablette)	Chocolate bar (70% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
4973	Chocolat noir 50% (tablette)	Chocolate bar (50% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
4974	Chocolat artisanal 47% (poudre)	Chocolate powder (47% cocoa)	+	st	st	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
4975	Poudre de cacao 100%	Cocoa powder (100% cocoa)	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
4976	Poudre de cacao 100%	Cocoa powder (100% cocoa)	+	+p	+p	+p	+p	+	+	i	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
4977	Poudre de cacao 100%	Cocoa powder (100% cocoa)	+	+p	+p	+p	+p	+	-	+	st	st	/	/	-	-	ND	i (-)	i	-	+	-	-	-	ND	ND
4978	Cacao maigre en poudre 100%	Chocolate powder (100% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	i (-)	i	+	+	+	+	+	ND	PA
4979	Chocolat en poudre 50%	Chocolate powder (50% cocoa)	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5126	Chocolat en tablette 70% cacao	Chocolate bar (70% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
5127	Chocolat en poudre 32% cacao	Chocolate powder (32% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
5128	Poudre de cacao 100%	Cocoa powder (100% cocoa)	+	st	+	+p	+p	+	i/-* (-)	i/+*	st	st	/	/	-	-	ND	i (-)	i	-	+	-	-	-	ND	ND
5129	Poudre de cacao 100%	Cocoa powder (100% cocoa)	+	st	st	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
5493	Tablette chocolat noir (47% cacao)	Chocolate bar (47% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
5494	Tablette chocolat (90% cacao)	Chocolate bar (90% cocoa)	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
5495	Tablette chocolat (60% cacao)	Chocolate bar (60% cocoa)	-	st	st	st	st	-	-/-/-	+	+p	+p	+	+	+	-	NA	-	+	+	+	+	-	+	NA	PD
5496	Paillettes fines chocolat (40,9% cacao)	Chocolate (40,9% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
5497	Chocolat noir (50% cacao)	Chocolate (50% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
5498	Chocolat poudre 100% cacao	Chocolate powder (100% cocoa)	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5499	Chocolat poudre 100% cacao	Chocolate powder (100% cocoa)	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5500	Chocolat poudre 100% cacao	Chocolate powder (100% cocoa)	+	st	st	st	st	-	+	+	+p	+p	+	+	+	+	PD	+	+	+	+	+	+	+	PD	PD
5501	Chocolat poudre 100% cacao	Chocolate powder (100% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	-	+	+	+	+	-	+	ND	PA
5502	Préparation petit déjeuner (30% cacao)	Cocoa based product (30% cocoa)	+	+m	+m	+m	+m	+	-/-/-	+	+M	+M	+	+	+	-	ND	-/-/-	+	-	+	+	-	-	ND	ND
5503	Préparation petit déjeuner (32% cacao)	Cocoa based product (32% cocoa)	-	st	st	st	st	-	-/-/-	+	+p	+p	+	+	+	-	NA	i/i/i (-)	i/i/i	+	+	+	-	+	NA	PD
5505	Préparation petit déjeuner (32% cacao)	Cocoa based product (32% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA
5506	Préparation petit déjeuner (32% cacao)	Cocoa based product (32% cocoa)	-	st	st	st	st	-	-	+	st	st	/	/	-	-	NA									
5508	Préparation petit déjeuner (24% cacao)	Cocoa based product (24% cocoa)	+	+M	+M	+p	+p	+	-/-/-	+	st	st	/	/	-	-	ND	-	+	-	+	-	-	-	ND	ND
5509	Préparation petit déjeuner (32% cacao)	Cocoa based product (32% cocoa)	+	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	PA	+	+	+	+	+	+	+	PA	PA

♦ Analyses performed according to the COFRAC accreditation

COCOA AND COCOA BASED PRODUCTS

N° Sample	Product (French name)	Product (English name)	Global result Protocol 4	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																
									Protocol 4 : UHT Milk + Brilliant Green enrichment - 24H at 37°C									Protocol 4 : UHT Milk + Brilliant Green enrichment - 24H at 37°C + 72H at 4°C								
											Confirmatory tests								Lysate storage		BPW storage			Final result		Agreement/ISO 6579	
				RVS broth		MKTTn broth		Final result	MDS	MC	RVS/XLD	RVS/ASAP	Latex	Tests ref (API/Aggl)	Confirmation	Final result	Agreement / ISO 6579	MDS	MC	MDS	MC	Confirmation	Lysate storage	BPW storage	Lysate storage	BPW storage
				XLD	ASAP	XLD	ASAP																				
5510	**Préparation petit déjeuner**	**Cocoa based product**	**-**	st	st	st	st	-	-	+	-	+p	-	NC	-	-	**NA**	-	+	-	+	-	-	-	**NA**	**NA**
5512	**Préparation petit déjeuner (21% cacao)**	**Cocoa based product (21% cocoa)**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
25	**Masse de cacao**	**Cocoa mass**	**+**	+p	+p	+p	+p	+	-/-/-	+	+p	+p	+	+	+	-	**ND**	-	+	-	+	+	-	-	**ND**	**ND**
26	**Masse de cacao**	**Cocoa mass**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
27	**Beurre de cacao**	**Cocoa butter**	**+**	+p	+p	+p	+p	+	-/-/-	+	+p	+p	+	+	+	-	**ND**	-	+	-	+	+	-	-	**ND**	**ND**
28	**Beurre de cacao**	**Cocoa butter**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
29	**Beurre de cacao**	**Cocoa butter**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
30	Poudre de cacao 100% (matière première)	Cocoa powder (Raw material))	**-**	st	st	st	st	-	i/-* (-)	i/+*	st	st	/	/	-	-	**NA**									
31	Pistoles chocolat au lait	Milk chocolate (raw material)	**-**	-	-	-	-	-	-	+	-	-	/	/	-	-	**NA**									
32	Chocolat en poudre (100% cacao)	Cocoa powder (100% cocoa)	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
33	Chocolat en poudre (100% cacao)	Cocoa powder (100%)	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
34	Préparation pour petit déjeuner (24% cacao)	**Cocoa based product (24% cocoa)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
35	Préparation pour petit déjeuner (27% cacao)	**Cocoa based product (27% cocoa)**	**-**	-	-	-	-	-	-	+	-	-	/	/	-	-	**NA**									
36	Préparation pour petit déjeuner (32% cacao)	**Cocoa based product (32% cocoa)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
37	Préparation pour petit déjeuner (21% cacao)	**Cocoa based product (21% cocoa)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
38	Chocolat noir dessert (tablettes)	Black chocolate bar	**-**	st	st	st	st	-	-	+	-	-	/	/	-	-	**NA**									
39	Chocolat noir 86% cacao (tablettes)	Black chocolate bar (cocoa 86%)	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
40	Chocolat noir (tablettes)	Black chocolate bar	**-**	-	-	-	-	-	-	+	st	st	/	/	-	-	**NA**									
41	Chocolat noir 85% cacao (tablettes)	Black chocolate bar (cocoa 85%)	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
42	Chocolat noir 70% cacao (tablettes)	Black chocolate bar (cocoa 70%)	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
43	Chocolat blanc dessert (tablettes)	White chocolate bar	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
44	Chocolat blanc dessert (tablettes)	White chocolate bar	**-**	st	st	st	st	-	i/-* (-)	i/+*	st	st	/	/	-	-	**NA**									
45	Chocolat blanc dessert (tablettes)	White chocolate bar	**-**	-	-	-	-	-	-	+	st	st	/	/	-	-	**NA**									
46	Fèves de cacao	Cocoa beans	**-**	-	-	-	-	-	-	+	st	st	/	/	-	-	**NA**									
47	Fèves de cacao	Cocoa beans	**+**	+m	+m	+1/2	+m	+	+	+	+m ni/+	+m ni/+	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
135	Masse de cacao	Cocoa mass	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
136	Masse de cacao	Cocoa mass	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
137	Beurre de cacao	Cocoa butter	**-**	st	st	st	st	-	i/-* (-)	i/+*	st	st	/	/	-	-	**NA**									
138	Beurre de cacao	Cocoa butter	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
139	Pistoles chocolat au lait	Milk chocolate (raw material)	**-**	st	st	st	st	-	-	+	-	-	/	/	-	-	**NA**									
226	**Beurre de cacao**	Cocoa butter	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
227	**Beurre de cacao**	Cocoa butter	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
228	**Coques de cacao**	Cocoa shells	**-**	-	-	-	-	-	-	+	-	-	/	/	-	-	**NA**									
229	**Chocolat au lait (Matière première)**	Milk chocolate (raw material)	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	+	**PD**	+	+	+	+	+	+	+	**PD**	**PD**

Bold typing: artificial contaminations NC: non characteristic colonies on nutrient agar +/-: doubtful colonies ox: oxidase test ni: non isolated colonies *: 1/2 dilution applied on BPW before lysis step
st: plate without colonies +1/2:50% target +m:minority of target bacteria +M:majority of target bacteria p: culture **: 1/5 dilution applied on BPW before lysis step
( ) Result without taking into account the Matrix Control

MILK POWDERS

N° Sample	Product (French name)	Product (English name)	Global result Protocol 3	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																	
									Protocol 3: 20h at 37°C									Protocol 3: 20h at 37°C + 72h at 4°C								
											Confirmatory tests							MDS result					Final result 20µL		Agreement 20µL/ ISO 6579	
				RVS broth		MKTTn broth																				
				XLD	ASAP	XLD	ASAP	Final result	MDS	MC	RVS/XLD	RVS/ASAP	Latex	Tests ref (API/Aggl)	Confir-mation	Final result	Agreement /ISO 6579	Lysate storage MDS	MC	BPW storage MDS	MC	Confir-mation	Lysate storage	BPW storage	Lysate storage	BPW storage
4985	**Poudre de lait infantile hypoallergénique**	**Hypoallergenic infant formula milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
4986	**Poudre de lait infantile hypoallergénique**	**Hypoallergenic infant formula milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
4987	**Poudre de lait infantile avec probiotiques Lactobacillus reuteri DSM 17938 (2,0.10² UFC/g)**	**Infant formula milk powder with probiotics Lactobacillus reuteri DSM 17938 (2,0.10²/g)**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
4988	**Poudre de lait infantile avec probiotiques Bifidobactéries / ferments lactiques**	**Infant formula milk powder with probiotics Bifidobacterium / Lactic ferment**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4989	**Poudre de lait infantile avec probiotiques Bifidobactéries / ferments lactiques (6,0.10² UFC/g)**	**Infant formula milk powder with probiotics Bifidobacterium / Lactic ferment (6,0.10²/g)**	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	+	**PD**	+	+	+	+	+	+	+	**PD**	**PD**
4990	**Poudre de lait infantile avec probiotiques Bifidobactéries / ferments lactiques (5,2.10⁵ UFC/g)**	**Infant formula milk powder with probiotics Bifidobacterium / Lactic ferment (5,2.10⁵/g)**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4991	**Poudre de lait infantile**	**Infant formula milk powder**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4992	**Poudre de lait infantile**	**Infant formula milk powder**	**+**	+p	+p	+p	+p	+	-/+/+	+	+p	+p	+	+	+	-	**PPND**	+	+	+	+	+	+	+	**PA**	**PA**
4993	**Poudre de lait infantile**	**Infant formula milk powder**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4994	**Poudre de lait infantile**	**Infant formula milk powder**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4995	**Poudre de lait infantile**	**Infant formula milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
4996	**Poudre de lait infantile**	**Infant formula milk powder**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4997	**Poudre de lait infantile**	**Infant formula milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
4998	**Poudre de lait infantile**	**Infant formula milk powder**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
4999	**Poudre de lait**	**Milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5092	**Poudre de lait écrémé bio**	**Skimmed milk powder**	**+**	+p	-	+p	-	+	+	+	+p	-	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5093	**Poudre de lait entier**	**Milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5094	**Poudre de lait écrémé**	**Skimmed milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5095	**Poudre de lait demi - écrémé**	**Half skimmed milk powder**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5096	**Poudre de lait écrémé**	**Skimmed milk powder**	**+**	+p	+p	+p	+p	+	+ (+)	i	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5097	**Poudre de lait cuisine**	**Milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**

♦ Analyses performed according to the COFRAC accreditation

MILK POWDERS																												
N° Sample	Product (French name)	Product (English name)	Global result Protocol 3	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																		
									Protocol 3: 20h at 37°C									Protocol 3: 20h at 37°C + 72h at 4°C									
				RVS broth		MKTTn broth		Final result	MDS	MC	Confirmatory tests					Final result	Agreement /ISO 6579	MDS result					Final result 20µL		Agreement 20µL/ ISO 6579	
				XLD	ASAP	XLD	ASAP				RVS/XLD	RVS/ASAP	Latex	Tests ref (API/Aggl)	Confir-mation			Lysate storage MDS	MC	BPW storage MDS	MC	Confir-mation	Lysate storage	BPW storage	Lysate storage	BPW storage
5098	**Poudre de lait écrémé**	**Skimmed milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5099	**Poudre de lait écrémé**	**Skimmed milk powder**	**+**	+p	-	+p	-	+	+	+	+p	-	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5100	**Poudre de lait demi - écrémé**	**Half skimmed milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5101	**Poudre de lait écrémé**	**Skimmed milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5102	**Poudre de lait écrémé**	**Skimmed milk powder**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5103	**Poudre de lait écrémé**	**Skimmed milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5104	**Poudre de lait hypoallergénique 1er âge**	**Hypoallergenic infant formula milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5105	**Poudre de lait hypoallergénique 2ème age**	**Hypoallergenic infant formula milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5106	**Poudre de lait hypoallergénique**	**Hypoallergenic infant formula milk powder**	**+**	+p	-	+p	-	+	+	+	+p	-	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5107	**Poudre de lait hypoallergénique 1er âge**	**Hypoallergenic infant formula milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5108	**Poudre de lait hypoallergénique 1er âge**	**Hypoallergenic infant formula milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5109	**Poudre de lait avec probiotiques 1er âge Bifidobactéries-ferments lactiques**	**Infant formula milk powder with probiotics Bifidobacterium / Lactic ferment**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5110	**Poudre de lait avec probiotiques Lactobacillus reuteri-S.thermophilus (7,2.10⁴/g)**	**Infant formula milk powder with probiotics Lactobacillus reuteri - S.thermophilus (7,2.10⁴/g)**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5111	**Poudre de lait avec probiotiques 2ème âge Lactobacillus rhamnosus - Bifidobacterium infantis (2,2.10⁶/g)**	**Infant formula milk powder with probiotics Lactobacillus rhamnosus - Bifidobacterium infantis (2,2.10⁶/g)**	**+**	+p	+p	+p	+p	+	-	+	st	st	/	/	-	-	**ND**	+	+	-	-	- (MSRVx5)	-	-	**PPND**	**ND**
5112	**Poudre de lait avec probiotiques 2ème âge**	**Infant formula milk powder with probiotics**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5113	**Poudre de lait avec probiotiques 1er âge**	**Infant formula milk powder with probiotics**	**+**	+p	-	+p	-	+	+	+	+p	-	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5395	**Poudre de lait infantile**	**Infant formula milk powder**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5396	**Poudre de lait infantile bio**	**Infant formula milk powder**	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5397	**Poudre de lait écrémé**	**Skimmed milk powder**	**+**	+p	+p	+p	+p	+	+ (+)	i	+p	+p	+		+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5398	**Poudre de lait écrémé**	**Skimmed milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+		+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5399	**Poudre de lait 1/2 écrémé**	**Half skimmed milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+		+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5400	**Poudre de lait 1/2 écrémé**	**Half skimmed milk powder**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+		+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5401	Poudre de lait infantile	Infant formula milk powder	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5402	Poudre de lait infantile	Infant formula milk powder	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5403	Poudre de lait infantile	Infant formula milk powder	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5404	Poudre de lait infantile	Infant formula milk powder	**-**	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									

MILK POWDERS																												
N° Sample	Product (French name)	Product (English name)	Global result Protocol 3	ISO 6579 method♦					3M™ Molecular detection Assay *Salmonella* method																		
									Protocol 3: 20h at 37°C									Protocol 3: 20h at 37°C + 72h at 4°C									
				RVS broth		MKTTn broth					Confirmatory tests							MDS result					Final result 20µL		Agreement 20µL/ ISO 6579	
				XLD	ASAP	XLD	ASAP	Final result	MDS	MC	RVS/XLD	RVS/ASAP	Latex	Tests ref (API/Aggl)	Confir-mation	Final result	Agreement /ISO 6579	Lysate storage MDS	MC	BPW storage MDS	MC	Confir-mation	Lysate storage	BPW storage	Lysate storage	BPW storage
5405	Poudre de lait infantile	Infant formula milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5406	Poudre de lait infantile	Infant formula milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5407	Poudre de lait infantile	Infant formula milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5408	Poudre de lait infantile	Infant formula milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5409	Poudre de lait infantile 3ème âge saveur vanille	Infant formula milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5410	Poudre de lait infantile 1er âge	Infant formula milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5411	Poudre de lait infantile 2ème âge	Infant formula milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5412	Poudre de lait infantile dès la naissance	Infant formula milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5413	Poudre de lait écrémé	Skimmed milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5414	Poudre de lait écrémé	Skimmed milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5415	Poudre de lait écrémé	Skimmed milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5416	Poudre de lait écrémé	Skimmed milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5417	Poudre de lait écrémé	Skimmed milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5418	Poudre de lait écrémé bio	Skimmed milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5419	Poudre de lait écrémé	Skimmed milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5420	Poudre de lait entier	Milk powder	-	st	st	st	st	-	-	+	st	st	/	/	-	-	**NA**									
5688	**Poudre de lait infantile avec probiotiques Lactobacillus reuteri DSM 17938 0,1%**	**Infant formula milk powder with probiotics Lactobacillus reuteri DSM 17938 0,1%**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5689	**Poudre de lait avec probiotique Lactobacillus rhamnosus, Bifidobacterium infantis**	**Infant formula milk powder with probiotics Lactobacillus rhamnosus, Bifidobacterium infantis**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5690	**Poudre de lait avec probiotique Salmonella thermophilus (0,034%), B. longum**	**Infant formula milk powder with probiotics Salmonella thermophilus (0,034%), B. longum**	**+**	+p	+p	+p	+p	+	+	+	+p	+p	+	+	+	+	**PA**	+	+	+	+	+	+	+	**PA**	**PA**
5691	**Poudre de lait avec probiotique Bifidobacterium, Ferments lactiques**	**Infant formula milk powder with probiotics Bifidobacterium, lactic ferment**	**+**	st	st	st	st	-	+	+	+p	+p	+	+	+	+	**PD**	+	+	+	+	+	+	+	**PD**	**PD**

Appendix 5 – Relative detection levels

Raw milk

Salmonella Montevideo 916

Level	Inoculation level	I.C.	Method	Negative	Positive	Total
0	/	/	Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
1	0.4	[0;2]	Reference	6	0	6
			Alternative	5	1	6
			Total	11	2	12
2	0.7	[0;3]	Reference	4	2	6
			Alternative	2	4	6
			Total	6	8	12
3	1.5	[0;4]	Reference	1	5	6
			Alternative	4	2	6
			Total	5	4	12
4	3.7	[1;8]	Reference	0	6	6
			Alternative	0	6	6
			Total	0	12	12

Ground beef

Salmonella Infantis 128

Level	Inoculation level	I.C.	Method	Negative	Positive	Total
0	/	/	Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
1	0.3	[0;1]	Reference	6	0	6
			Alternative	4	2	6
			Total	10	2	12
2	0.6	[0;2]	Reference	3	3	6
			Alternative	4	2	6
			Total	7	5	12
3	1.2	[0;4]	Reference	3	3	6
			Alternative	2	4	6
			Total	5	7	12
4	2.4	[1;6]	Reference	0	6	6
			Alternative	1	5	6
			Total	1	11	12

Egg product

Salmonella Enteritidis 465

Level	Inoculation level	I.C.	Method	Negative	Positive	Total
0	/	/	Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
1	0.4	[0;2]	Reference	3	3	6
			Alternative	3	3	6
			Total	6	6	12
2	0.8	[0;3]	Reference	1	5	6
			Alternative	1	5	6
			Total	2	10	12
3	1.6	[0;4]	Reference	3	3	6
			Alternative	3	3	6
			Total	6	6	12
4	4.0	[1;8]	Reference	0	6	6
			Alternative	1	5	6
			Total	1	11	12

Spinach

Salmonella Virchow F276

Level	Inoculation level	I.C.	Method	Negative	Positive	Total
0	/	/	Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
1	0.3	[0;2]	Reference	4	2	6
			Alternative	5	1	6
			Total	9	3	12
2	0.5	[0;2]	Reference	2	4	6
			Alternative	4	2	6
			Total	6	6	12
3	1.0	[0;3]	Reference	3	3	6
			Alternative	1	5	6
			Total	4	8	12
4	2.0	[0;5]	Reference	3	3	6
			Alternative	1	5	6
			Total	4	8	12
5	5.4	[1;10]	Reference	0	6	6
			Alternative	0	6	6
			Total	0	12	12

Process water

Salmonella Livingstone A00E058

Level	Inoculation level	I.C.	Method	Negative	Positive	Total
0	/	/	Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
1	0.3	[0;1]	Reference	4	2	6
			Alternative	4	2	6
			Total	8	4	12
2	0.6	[0;2]	Reference	5	1	6
			Alternative	4	2	6
			Total	9	3	12
3	1.1	[0;4]	Reference	3	3	6
			Alternative	4	2	6
			Total	7	5	12
4	5.7	[2;11]	Reference	0	6	6
			Alternative	0	6	6
			Total	0	12	12

Cinnamon

Salmonella Agona Ad1725

Level	Inoculation level	I.C.	Method	Negative	Positive	Total
0	/	/	Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
1	0.5	[0;2]	Reference	6	0	6
			Alternative	5	1	6
			Total	11	1	12
2	0.9	[0;3]	Reference	4	2	6
			Alternative	6	0	6
			Total	10	2	12
3	1.8	[0;5]	Reference	3	3	6
			Alternative	4	2	6
			Total	7	5	12
4	6.6	[2;12]	Reference	0	6	6
			Alternative	0	6	6
			Total	0	12	12

Fish culinary product (lemon-aromatic herbs-White wine)

Samonella Indiana 2

Level	Inoculation level	I.C.	Method	Negative	Positive	Total
0	/	/	Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
1	0.5	[0;2]	Reference	4	2	6
			Alternative	3	3	6
			Total	7	5	12
2	0.9	[0;3]	Reference	3	3	6
			Alternative	3	3	6
			Total	6	6	12
3	2.0	[0;5]	Reference	2	4	6
			Alternative	1	5	6
			Total	3	9	12
4	3.8	[1;5]	Reference	0	6	6
			Alternative	0	6	6
			Total	0	12	12
5	10.0	[4;17]	Reference	0	6	6
			Alternative	0	6	6
			Total	0	12	12

Cocoa powder

Salmonella Braenderup Ad1661

Level	Inoculation level	I.C.	Method	Negative	Positive	Total
0	/	/	Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
1	0.4	[0;2]	Reference	5	1	6
			Alternative	4	2	6
			Total	9	3	12
2	0.7	[0;3]	Reference	3	3	6
			Alternative	4	2	6
			Total	7	5	12
3	1.8	[0;5]	Reference	0	6	6
			Alternative	1	5	6
			Total	1	11	12
4	3.0	[0;7]	Reference	0	6	6
			Alternative	0	6	6
			Total	0	12	12

Infant formula with probiotics (Bifidobacterium longum-Steptococcus thermophilus)

Salmonella Anatum Ad298

Level	Inoculation level	I.C.	Method	Negative	Positive	Total
0	/	/	Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
1	0.3	[0;2]	Reference	6	0	6
			Alternative	5	1	6
			Total	11	1	12
2	0.5	[0;2]	Reference	4	2	6
			Alternative	4	2	6
			Total	8	4	12
3	1.1	[0;4]	Reference	3	3	6
			Alternative	2	4	6
			Total	5	7	12
4	2.2	[0;5]	Reference	0	6	6
			Alternative	1	5	6
			Total	1	11	12

Appendix 6 – Inclusivity and exclusivity

INCLUSIVITY														
N°	Reference			Origin	Inoculation level (cfu/225ml BPW) Incubation 18 H at 41,5°c	3M Molecular Detection System	Confirmatory tests							
							RVS				MKTTn			
							XLD		ASAP		XLD		ASAP	
							Typical colonies	Latex	Typical colonies	Latex	Typical colonies	Latex	Typical colonies	Latex
1	*Salmonella*	Agona	A00V38	Feedstuff	25	+	+	+	+	+	+	+	+	+
2	*Salmonella*	Anatum	6140	Bœuf Bourguignon	1	+	+	+	+	+	+	+	+	+
3	*Salmonella*	*arizonae* SIIIa 51:z4,z23:-	CIP 5523	Turkey	9	+	+	+	+pale	-	+	+	+pale	-
4	*Salmonella*	*arizonae* SIIIa 50 ;z4 ;z23	CIP 5526	Egg powder	8	+	yellow	-	white and rough	-	yellow and black	-	white and rough	-
5	*Salmonella*	*diarizonae SIIIb 38:IV:z53*	Ad451	Raw milk cheese	19	+	+	+	+ pale	+	+	+	+pale	-
6	*Salmonella*	*diarizonae SIIIb 61:-:,1,5,7*	Ad1280	Raw milk cheese	18	+	yellow and black	+	pink	-	+	+	pink	-
7	*Salmonella*	Blockley	Ad 923	Chicken	7	+	+	+	+	+	+	+	+	+
8	*Salmonella*	Bovismorbificans	728	Agar	23	+	+	+	+	+	+	+	+	+
9	*Salmonella*	Braenderup	178	Food product	18	+	+	+	+	+	+	+	+	+
10	*Salmonella*	Brandenburg	Ad 351	Seafood	13	+	+	+	+	+	+	+	+	+
11	*Salmonella*	Bredeney	396	Ground beef	7	+	+	+	+	+	+	+	+	+
12	*Salmonella*	Cerro	Ad 689	Dehyadrated proteins	12	+	+	+	+	+	+	+	+	+
13	*Salmonella*	Cremieu	230	Hare	6	+	+	+	+	+	+	+	+	+
14	*Salmonella*	Derby	Ad 1093	Frozen fish fillet	12	+	+	+	+	+	+	+	+	+
15	*Salmonella*	Dublin	Ad 529	Beef meat	13	+	+	+	white	+	+	+	white	+
16	*Salmonella*	Enteritidis	Ad 926	Raw veal meat	14	+	+	+	+	+	+	+	+	+
17	*Salmonella*	Gallinarum	Ad 300	Poultry slaughterhouse	2	+	colourless and small	+	small and pink	+	colourless and small	+	small and pink	+
18	*Salmonella*	Give	436	Ground beef	12	+	+	+	+	+	+	+	+	+
19	*Salmonella*	Hadar	35	Poultry	11	+	+	+	+	+	+	+	+	+

INCLUSIVITY															
N°	Reference			Origin	Inoculation level (cfu/225ml BPW) Incubation 18 H at 41,5°c	3M Molecular Detection System	Confirmatory tests								
							RVS				MKTTn				
							XLD		ASAP		XLD		ASAP		
							Typical colonies	Latex	Typical colonies	Latex	Typical colonies	Latex	Typical colonies	Latex
20	*Salmonella*	Havana	Ad 930	Poultry	12	+	+	+	+	+	+	+	+	+
21	*Salmonella*	Heidelberg	A00E005	Dairy industry environmental sample	5	+	+	+	+	+	+	+	+	+
22	*Salmonella*	*houtenae* (sub-group IV) 43:z4z32	Ad 597	Fish	10	+	+	+	+	+	+	+	+	+
23	*Salmonella*	Indiana	2	Fish flour	4	+	+	+	+	+	+	+	+	+
24	*Salmonella*	*indica* (sub-group VI) 1,26,14,25:a:enx	Ad 600	Environmental sample	6	+	+(yellow with black center)	+	+	+	+(yellow with black center)	+	+	+
25	*Salmonella*	Infantis	12	Ready-to-eat	2	+	+	+	+	+	+	+	+	+
26	*Salmonella*	Kedougou	Ad 929	Environmental sample (slaughterhouse)	4	+	+	+	+	+	+	+	+	+
27	*Salmonella*	Kottbus	1	Environmental sample (slaughterhouse)	11	+	+	+	+	+	+	+	+	+
28	*Salmonella*	Livingstone	E1	Egg white powder	10	+	+	+	+	+	+	+	+	+
29	*Salmonella*	London	326	Ham	61	+	+	+	+	+	+	+	+	+
30	*Salmonella*	Manhattan	900	Dairy environmental sample	20	+	+	+	+	+	+	+	+	+
31	*Salmonella*	Mbandaka	Ad 914	Mayonnaise	3	+	+	+	+	+	+	+	+	+
32	*Salmonella*	Montevideo	Ad 912	Raw milk	7	+	+	+	+	+	+	+	+	+
33	*Salmonella*	Napoli	Ad 928	Bovine	4	+	+	+	+	+	+	+	+	+
34	*Salmonella*	Newport	540	Toulouse sausage	4	+	+	+	+	+	+	+	+	+
35	*Salmonella*	Panama	195	Ground beef	4	+	+	+	+	+	+	+	+	+
36	*Salmonella*	Paratyphi A	ATCC 9150		5	+	+(white)	+	+	+	+(white)	+	+	+
37	*Salmonella*	Paratyphi B	Ad 301	Clinical	3	+	+	+	+	+	+	+	+	+
38	*Salmonella*	Paratyphi C	ATCC 13428		1	+	+	+	+	+	+	+	+	+
39	*Salmonella*	Regent	328	Duck	12	+	+	+	+	+	+	+	+	+

INCLUSIVITY															
N°	Reference			Origin	Inoculation level (cfu/225ml BPW) Incubation 18 H at 41,5°c	3M Molecular Detection System	Confirmatory tests								
							RVS				MKTTn				
							XLD		ASAP		XLD		ASAP		
							Typical colonies	Latex	Typical colonies	Latex	Typical colonies	Latex	Typical colonies	Latex
40	*Salmonella*	Rissen	39	Poultry	5	+	+	+	+	+	+	+	+	+
41	*Salmonella*	Saintpaul	F31	Pilchard fillet	7	+	+	+	+	+	+	+	+	+
42	*Salmonella*	*salamae* (sub-group II) 42:b:enxz	Ad 593	Cereals	7	+	+	+	+	+	+	+	+	+
43	*Salmonella*	Senftenberg	Ad 355	Seafood	5	+	+	+	+	+	+	+	+	+
44	*Salmonella*	Typhi	Ad 302	Clinical	1	+	+	+	+	+	+	+	+	+
45	*Salmonella*	Typhimurium	305	Paella	9	+	+	+	+	+	+	+	+	+
46	*Salmonella*	Typhimurium SI 1,4,[5],12:-:- (variant immobile)	Ad 1233	Tiramisu	6	+	+	+	+	+	+	+	+	+
47	*Salmonella*	Typhimurium SI 1,4,[5],12:i:- (variant monophasique)	Ad 1334	Ready-to-eat meal (meat)	6	+	+	+	+	+	+	+	+	+
48	*Salmonella*	Typhimurium SI 1,4,[5],12:-:1,2 (variant monophasique)	Ad 1335	Enviromental sample	6	+	+	+	+	+	+	+	+	+
49	*Salmonella*	Urbana	Ad 501	Food product	56	+	st	/	st	/	+	+	+	+
50	*Salmonella*	Virchow	F276	Curry	13	+	+	+	+	+	+	+	+	+

EXCLUSIVITY					
N°	Reference		Origin	Inoculation level (cfu/ml BPW)	3M Molecular Detection System
1	*Citrobacter braakii*	Ad833	Raw beef meat	3.7 10^5	-
2	*Citrobacter Diversus*	adria 140	Raw milk	3.6 10^5	-
3	*Citrobacter freundii*	adria 23	Raw pork sausage	3.2 10^5	-
4	*Citrobacter freundii*	adria 175	Raw duck meat	9.5 10^5	-
5	*Citrobacter koseri*	adria 71	Frozen vegetables	1.0 106	-
6	*Enterobacter agglomerans*	adria 11	Cheese	2.8 10^5	-
7	*Enterobacter amnigenus*	A00C068	Raw poultry meat	2.4 10^5	-
8	*Enterobacter cloacae*	adria 10	Raw milk	1.6 10^5	-
9	*Enterobacter intermedius*	adria 60	Bean	1.1 10^5	-
10	*Enterobacter kobei*	Ad 342	Ham	2.6 10^5	-
11	*Enterobacter sakazakii*	adria 95	Fermented milk	2.4 10^5	-
12	*Erwinia carotovora*	CIP 8283	Potatoes	6.0 10^3	-
13	*Escherichia coli*	adria 19	Greated carrots	1.4 10^5	-
14	*Escherichia hermanii*	Ad 461	Dessert	1.2 10^5	-
15	*Escherichia vulneris*	adria 127	Raw milk	6.4 10^5	-
16	*Hafnia alvei*	adria 167	Raw pork sausage	9.1 10^5	-
17	*Klebsiella oxytoca*	57	Food product	2.9 10^5	-
18	*Klebsiella pneumoniae*	47	Raw turkey meat	2.9 10^5	-
19	*Kluyvera spp*	adria 41	Raw milk	3.1 10^5	-
20	*Morganella morganii*	CIP A236	/	4.4 10^5	-
21	*Pantoea agglomerans*	adria 86	Frozen vegetables	7.9 10^5	-
22	*Proteus mirabilis*	Ad639	Mayonnaise	7.1 10^5	-
23	*Proteus vulgaris*	adria 43	Sliced ham	2.0 10^5	-
24	*Providencia rettgeri*	adria 112	White liquid egg	3.0 10^5	-
25	*Rhanella aquatilis*	adria 69	Molluscs	8.0 10^3	-
26	*Serratia liquefaciens*	26	Egg product	1.9 10^5	-
27	*Serratia proteomaculans*	A00C056	Ham	1.1 10^5	-
28	*Shigella flexneri*	CIP 8248	/	2.3 10^5	-
29	*Shigella sonnei*	CIP 8249T (ATCC 29930)	/	2.0 10^5	-
30	*Yersinia enterocolotica*	adria 32	Bacon	1.7 10^5	-

Appendix 7 – Inter-laboratory study results

Laboratory A

Aerobic mesophilic flora:2,3.10^4/g

N° Sample	Reference method : ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
A2	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
A6	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
A8	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
A9	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
A13	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
A18	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
A23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
A24	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
A1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
A21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory B

Aerobic mesophilic flora:2,9.10^4/g

N° Sample	Reference method : ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
B2	-	-	-	-	/	-	-*	/	/	/	/	/	-	**NA**
B6	-	-	-	-	/	-	-*	/	/	/	/	/	-	**NA**
B8	-	-	-	-	/	-	+*	-	-	-	-	-	-	**PPNA**
B9	-	-	-	-	/	-	-*	/	/	/	/	/	-	**NA**
B13	-	-	-	-	/	-	-*	/	/	/	/	/	-	**NA**
B18	-	-	-	-	/	-	+*	-	-	-	-	-	-	**PPNA**
B23	-	-	-	-	/	-	-*	/	/	/	/	/	-	**NA**
B24	-	-	-	-	/	-	-*	/	/	/	/	/	-	**NA**
B1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
B21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

* MDS results obtained with the second lysates from BPW stored 5 days at 4°C, kept for the final result

Laboratory C

Aerobic mesophilic flora: *not realised*

N° Sample	Reference method : ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
C2	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
C6	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
C8	-	-	-	-	/	-	+	+	+	+	+	+	+	**PD**
C9	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
C13	-	-	-	-	/	-	+	+	+	+	+	+	+	**PD**
C18	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
C23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
C24	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
C1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
C21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory D

Aerobic mesophilic flora: *not realised*

N° Sample	Reference method : ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
D2	/	/	/	/	/	/	-	/	/	/	/	/	-	/
D6	/	/	/	/	/	/	-	/	/	/	/	/	-	/
D8	/	/	/	/	/	/	-	/	/	/	/	/	-	/
D9	/	/	/	/	/	/	-	/	/	/	/	/	-	/
D13	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D18	/	/	/	/	/	/	+ (atypical curve)	/	-	/	/	/	-	/
D23	/	/	/	/	/	/	-	/	/	/	/	/	-	/
D24	/	/	/	/	/	/	-	/	/	/	/	/	-	/
D1	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D4	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D7	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D11	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D14	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D16	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D19	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D22	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D3	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D5	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D10	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D12	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D15	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D17	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D20	/	/	/	/	/	/	+	/	+	/	/	+	+	/
D21	/	/	/	/	/	/	+	/	+	/	/	+	+	/

Laboratory E

Aerobic mesophilic flora:2,2.10^4/g

N° Sample	Reference method :ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
E2	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
E6	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
E8	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
E9	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
E13	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
E18	-	-	-	-	/	-	+/-*	-	-	-	-	/	-	**PPNA**
E23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
E24	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
E1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
E21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

*: MDS test run with a second lysate done on BPW stored at 4°c

Laboratory F

Aerobic mesophilic flora:1,8.10^4/g

N° Sample	Reference method: ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
F2	-	-	-	-	/	-	+	-	-	-	-	/	-	**PPNA**
F6	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
F8	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
F9	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
F13	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
F18	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
F23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
F24	-	-	-	-	/	-	+	+	+	+	+	+	+	**PD**
F1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F5	-/+*	-/+*	-/+*	-/+*	/+*	-	+	+	+	+	+	+	+	**PD**
F10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
F21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

* second analysis

Laboratory G

Aerobic mesophilic flora:1,4.10^4/g

N° Sample	Reference method : ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
G2	-	-	-	-	/	-	+/-*	-	-	-	-	/	-	**NA**
G6	-	-	-	-	/	-	+/-*	-	-	-	-	/	-	**NA**
G8	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
G9	-	-	-	-	/	-	+/-*	-	-	-	-	/	-	**NA**
G13	-	-	-	-	/	-	+/-*	-	-	-	-	/	-	**NA**
G18	-	-	-	-	/	-	+/-*	-	-	-	-	/	-	**NA**
G23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
G24	-	-	-	-	/	-	+/-*	-	-	-	-	/	-	**NA**
G1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
G21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

*: MDS result obtained with the second lysate done on BPW stored 4 hours at 4°C

Laboratory H

Aerobic mesophilic flora:2,5.10^3/g

N° Sample	Reference method : ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
H2	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
H6	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
H8	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
H9	-	-	+	+	+	+	+	+	+	+	+	+	+	**PA**
H13	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
H18	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
H23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
H24	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
H1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
H21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory I

Aerobic mesophilic flora:3,7.10^4/g

N° Sample	Reference method: ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
I2	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
I6	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
I8	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
I9	-	-	-	-	/	-	+	-	-	-	-	/	-	**PPNA**
I13	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
I18	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
I23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
I24	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
I1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
I21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory J

Aerobic mesophilic flora:6,5.10^5/g

N° Sample	Reference method: ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
J2	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
J6	-	-	-	-	/	-	+	+	+	+	+	+	+	**PD**
J8	-	-	-	-	/	-	+	+	+	+	+	+	+	**PD**
J9	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
J13	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
J18	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
J23	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
J24	-	-	-	-	/	-	+	+	+	-	-	+	+	**PD**
J1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
J21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory K

Aerobic mesophilic flora: 6,3.10^4/g

N° Sample	Reference method : ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
K2	+	+	+	+	+	+	-	/	/	/	/	/	-	**ND**
K6	+	+	+	+	+	+	-	/	/	/	/	/	-	**ND**
K8	+	+	-	+	+	+	+	+	+	+	+	+	+	**PA**
K9	+	+	+	+	+	+	+	-	-	+	+	+	+	**PA**
K13	+	+	+	+	+	+	-	/	/	/	/	/	-	**ND**
K18	-	+	+	+	-	-	+	+	+	+	+	+	+	**PD**
K23	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K24	+	+	-	-	+	+	+	-	+	+	+	-	-	**PPND**
K1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
K21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory L

Aerobic mesophilic flora:1,5.10^4/g

N° Sample	Reference method : ISO 6579						Alternative method:							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
L2	+	+	-	-	+	+	+	-	-	-	-	/	-	**PPND**
L6	-	-	-	-	/	-	+	+	+	+	+	+	+	**PD**
L8	-	-	-	-	/	-	+	+	+	+	+	+	+	**PD**
L9	+	+	-	-	+	+	+	+	+	-	+	+	+	**PA**
L13	-	-	-	-	/	-	+	+	+	+	+	+	+	**PD**
L18	+	+	-	+	+	+	+	+	+	+	+	+	+	**PA**
L23	+	+	-	-	+	+	+	+	+	+	+	+	+	**PA**
L24	-	+	-	-	+	+	+	+	+	+	+	+	+	**PA**
L1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
L21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory M

Aerobic mesophilic flora:1,2.10^4/g

N° Sample	Reference method : ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
M2	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
M6	-	-	-	-	/	-	+	+	-	-	-	-	-	**PPNA**
M8	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
M9	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
M13	-	-	-	-	/	-		-	-	-	-	/	-	**NA**
M18	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
M23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
M24	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
M1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
M21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory N

Aerobic mesophilic flora:3,2.10^4/g

N° Sample	Reference method: ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
N2	-	-	+	+	+	+	+	+	+	+	+	+	+	**PA**
N6	-	-	+	+	+	+	+	+	+	+	+	+	+	**PA**
N8	-	+	+	+	+	+	-	/	/	/	/	/	-	**ND**
N9	-	-	-	+	+	+	-	/	/	/	/	/	-	**ND**
N13	-	-	+	+	+	+	-	/	/	/	/	/	-	**ND**
N18	+	+	-	+	+	+	+	+	+	+	+	+	+	**PA**
N23	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N24	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
N21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory O

Aerobic mesophilic flora:1,1.10^3/g

N° Sample	Reference method: ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
O2	-	-	+	+	+	+	+	-	+	-	-	+	+	**PA**
O6	-	-	-	-	/	-	+	-	+	-	-	-	-	**PPNA**
O8	-	-	+	+	+	+	-	-	-	-	-	/	-	**ND**
O9	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
O13	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
O18	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
O23	-	-	+	+	+	+	-	-	-	-	-	/	-	**ND**
O24	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
O1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
O21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory P

Aerobic mesophilic flora:2,0.10^4/g

N° Sample	Reference method : ISO 6579						Alternative method							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
P2	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
P6	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
P8	-	-	-	-	/	-	+	-	-	-	-	/	-	**PPNA**
P9	+	+	-	-	+	+	-	-	-	-	-	/	-	**ND**
P13	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
P18	-	-	+	+	-	-	-	-	-	-	-	/	-	**NA**
P23	-	+	-	-	-	-	+	-	-	-	-	/	-	**PPNA**
P24	+	+	+	+	-	-	-	-	-	-	-	/	-	**NA**
P1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
P21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory Q

Aerobic mesophilic flora:2,8.10^5/g

N° Sample	Reference method : ISO 6579						Alternative method:							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
Q2	+	+	-	-	+	+	+	-	-	-	-	/	-	**PPND**
Q6	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
Q8	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
Q9	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
Q13	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
Q18	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
Q23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
Q24	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
Q1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
Q21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory R

Aerobic mesophilic flora:1,0.10^4/g

N° Sample	Reference method :ISO 6579						Alternative method:							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
R2	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
R6	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
R8	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
R9	-	-	-	-	/	-	+	-	+	+	+	+	+	**PD**
R13	-	-	-	-	/	-	+	-	-	-	-	/	-	**PPNA**
R18	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
R23	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
R24	-	-	-	-	/	-	-	/	/	/	/	/	-	**NA**
R1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
R21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

Laboratory S (ADRIA)

Aerobic mesophilic flora:2,6.10^4/g

N° Sample	Reference method: ISO 6579 ♦						Alternative method:							Agree-ment
	RVS		MKTTn		Latex	Final result	MDS test result	RVS		MKTTn		Latex	Final result	
	XLD	Brilliance Salmonella	XLD	Brilliance Salmonella				XLD	Brilliance Salmonella	XLD	Brilliance Salmonella			
S2	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
S6	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
S8	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
S9	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
S13	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
S18	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
S23	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
S24	-	-	-	-	/	-	-	-	-	-	-	/	-	**NA**
S1	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S4	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S7	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S11	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S14	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S16	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S19	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S22	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S3	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S5	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S10	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S12	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S15	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S17	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S20	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**
S21	+	+	+	+	+	+	+	+	+	+	+	+	+	**PA**

♦ Analysis performed according to the COFRAC accreditation

Appendix 8 – Specificity and sensitivity

Reference method positive results

Laboratory	Contamination level					
	L0		L1		L2	
	Obtained	Samples number	Obtained	Samples number	Obtained	Samples number
A	0	8	8	8	8	8
C	0	8	8	8	8	8
E	0	8	8	8	8	8
F	0	8	8	8	7	8
H	1	8	8	8	8	8
I	0	8	8	8	8	8
J	0	8	8	8	8	8
K	7	8	8	8	8	8
L	5	8	8	8	8	8
M	0	8	8	8	8	8
N	8	8	8	8	8	8
O	3	8	8	8	8	8
P	1	8	8	8	8	8
Q	1	8	8	8	8	8
R	0	8	8	8	8	8
Total	**26**	120	**120**	120	**119**	120

Alternative method positive results

Laboratory	Contamination level					
	L0		L1		L2	
	Obtained	Samples number	Obtained	Samples number	Obtained	Samples number
A	0	8	8	8	8	8
C	2	8	8	8	8	8
E	0	8	8	8	8	8
F	1	8	8	8	8	8
H	1	8	8	8	8	8
I	0	8	8	8	8	8
J	3	8	8	8	8	8
K	4	8	8	8	8	8
L	7	8	8	8	8	8
M	0	8	8	8	8	8
N	5	8	8	8	8	8
O	1	8	8	8	8	8
P	0	8	8	8	8	8
Q	0	8	8	8	8	8
R	1	8	8	8	8	8
Total	**25**	120	**120**	120	**120**	120

Appendix 9 – Paired results of the alternative and reference methods for each level

L0	Reference method		Total
Alternative method	+	-	
+	14	11	25
-	12 (PPND=3)	83(PPNA=8)	95
Total	26	94	120

AC= 80.8

L1	Reference method		Total
Alternative method	+	-	
+	120	0	120
-	0	0	0
Total	120	0	120

AC= 100.0

L2	Reference method		Total
Alternative method	+	-	
+	119	1	120
-	0	0	0
Total	119	1	120

AC= 99.2

L1+L2	Reference method		Total
Alternative method	+	-	
+	239	1	240
-	0	0	0
Total	239	1	240

AC= 99.6

L0+L1+L2	Reference method		Total
Alternative method	+	-	
+	253	12	265
-	12 (PPND=3)	83 (PPNA=8)	95
Total	265	95	360

AC= 93.3

Appendix 10 – Accordance

Reference method

Level L0

Laboratory	Positive results number obtained	Positive results probability	Positive pairs probability	Negative results number obtained	Negative results probability	Negative pairs probability	Identical results pairs probability
A	0	0	0	8	1	1	1
C	0	0	0	8	1	1	1
E	0	0	0	8	1	1	1
F	0	0	0	8	1	1	1
H	1	0.125	0.015625	7	0.875	0.765625	0.78125
I	0	0	0	8	1	1	1
J	0	0	0	8	1	1	1
K	7	0.875	0.765625	1	0.125	0.015625	0.78125
L	5	0.625	0.390625	3	0.375	0.140625	0.53125
M	0	0	0	8	1	1	1
N	8	1	1	0	0	0	1
O	3	0.375	0.140625	5	0.625	0.390625	0.53125
P	1	0.125	0.015625	7	0.875	0.765625	0.78125
Q	1	0.125	0.015625	7	0.875	0.765625	0.78125
R	0	0	0	8	1	1	1
						Average	0.909375
						Accordance	90.9%

Level L1

Laboratory	Positive results number obtained	Positive results probability	Positive pairs probability	Negative results number obtained	Negative results probability	Negative pairs probability	Identical results pairs probability
A	8	1	1	0	0	0	1
C	8	1	1	0	0	0	1
E	8	1	1	0	0	0	1
F	8	1	1	0	0	0	1
H	8	1	1	0	0	0	1
I	8	1	1	0	0	0	1
J	8	1	1	0	0	0	1
K	8	1	1	0	0	0	1
L	8	1	1	0	0	0	1
M	8	1	1	0	0	0	1
N	8	1	1	0	0	0	1
O	8	1	1	0	0	0	1
P	8	1	1	0	0	0	1
Q	8	1	1	0	0	0	1
R	8	1	1	0	0	0	1
						Average	1
						Accordance	100%

Level L2

Laboratory	Positive results number obtained	Positive results probability	Positive pairs probability	Negative results number obtained	Negative results probability	Negative pairs probability	Identical results pairs probability
A	8	1	1	0	0	0	1
C	8	1	1	0	0	0	1
E	8	1	1	0	0	0	1
F	7	0.875	0.765625	1	0.125	0.015625	0.78125
H	8	1	1	0	0	0	1
I	8	1	1	0	0	0	1
J	8	1	1	0	0	0	1
K	8	1	1	0	0	0	1
L	8	1	1	0	0	0	1
M	8	1	1	0	0	0	1
N	8	1	1	0	0	0	1
O	8	1	1	0	0	0	1
P	8	1	1	0	0	0	1
Q	8	1	1	0	0	0	1
R	8	1	1	0	0	0	1
						Average	0.978125
						Accordance	97.8%

Alternative method

Level L0

Laboratory	Positive results number obtained	Positive results probability	Positive pairs probability	Negative results number obtained	Negative results probability	Negative pairs probability	Identical results pairs probability
A	0	0	0	8	1	1	1
C	2	0.25	0.0625	6	0.75	0.5625	0.625
E	0	0	0	8	1	1	1
F	1	0.125	0.015625	7	0.875	0.765625	0.78125
H	1	0.125	0.015625	7	0.875	0.765625	0.78125
I	0	0	0	8	1	1	1
J	3	0.375	0.140625	5	0.625	0.390625	0.53125
K	4	0.5	0.25	4	0.5	0.25	0.5
L	7	0.875	0.765625	1	0.125	0.015625	0.78125
M	0	0	0	8	1	1	1
N	5	0.625	0.390625	3	0.375	0.140625	0.53125
O	1	0.125	0.015625	7	0.875	0.765625	0.78125
P	0	0	0	8	1	1	1
Q	0	0	0	8	1	1	1
R	1	0.125	0.015625	7	0.875	0.765625	0.78125
						Average	0.8
						Accordance	80.00%

Level L1

Laboratory	Positive results number obtained	Positive results probability	Positive pairs probability	Negative results number obtained	Negative results probability	Negative pairs probability	Identical results pairs probability
A	8	1	1	0	0	0	1
C	8	1	1	0	0	0	1
E	8	1	1	0	0	0	1
F	8	1	1	0	0	0	1
H	8	1	1	0	0	0	1
I	8	1	1	0	0	0	1
J	8	1	1	0	0	0	1
K	8	1	1	0	0	0	1
L	8	1	1	0	0	0	1
M	8	1	1	0	0	0	1
N	8	1	1	0	0	0	1
O	8	1	1	0	0	0	1
P	8	1	1	0	0	0	1
Q	8	1	1	0	0	0	1
R	8	1	1	0	0	0	1
						Average	1
						Accordance	100%

Level L2

Laboratory	Positive results number obtained	Positive results probability	Positive pairs probability	Negative results number obtained	Negative results probability	Neagative pairs probability	Identical results pairs probability
A	8	1	1	0	0	0	1
C	8	1	1	0	0	0	1
E	8	1	1	0	0	0	1
F	8	1	1	0	0	0	1
H	8	1	1	0	0	0	1
I	8	1	1	0	0	0	1
J	8	1	1	0	0	0	1
K	8	1	1	0	0	0	1
L	8	1	1	0	0	0	1
M	8	1	1	0	0	0	1
N	8	1	1	0	0	0	1
O	8	1	1	0	0	0	1
P	8	1	1	0	0	0	1
Q	8	1	1	0	0	0	1
R	8	1	1	0	0	0	1
						Average	1
						Accordance	100%

Appendix 11 – Concordance

Reference method

Level LO

Laboratories number 15

Number of negative results per laboratory: 8

Lab.	Number of negative results	Interlaboratories pairs with the same result	Total interlaboratories pairs number
A	8	688	896
C	8	688	896
E	8	688	896
F	8	688	896
H	7	634	896
I	8	688	896
J	8	688	896
K	1	226	896
L	3	378	896
M	8	688	896
N	0	144	896
O	5	514	896
P	7	634	896
Q	7	634	896
R	8	688	896
Total		6 054	8 960
Concordance		67.6%	

Total + **26**
Total - **94**

Level L1

Laboratories number 15

Number of positive results per laboratory: 8

Lab.	Number of positive results	Interlaboratories pairs with the same result	Total interlaboratories pairs number
A	8	896	896
C	8	896	896
E	8	896	896
F	8	896	896
H	8	896	896
I	8	896	896
J	8	896	896
K	8	896	896
L	8	896	896
M	8	896	896
N	8	896	896
O	8	896	896
P	8	896	896
Q	8	896	896
R	8	896	896
Total		8 960	8 960
Concordance		100.0%	

Total + **120**
Total - **0**

Level L2

Laboratories number 15

Number of positive results per laboratory: 8

Lab.	Number of positive results	Interlaboratories pairs with the same result	Total interlaboratories pairs number
A	8	888	896
C	8	888	896
E	8	888	896
F	7	784	896
H	8	888	896
I	8	888	896
J	8	888	896
K	8	888	896
L	8	888	896
M	8	888	896
N	8	888	896
O	8	888	896
P	8	888	896
Q	8	888	896
R	8	888	896
Total		8 776	8960
Concordance		97.9%	

Total + **119**
Total - **1**

Alternative method

Level LO

Laboratories number 15

Number of negative results per laboratory: 8

Lab.	Number of negative results	Interlaboratories pairs with the same result	Total interlaboratories pairs number
A	8	696	896
C	6	580	896
E	8	696	896
F	7	640	896
H	7	640	896
I	8	696	896
J	5	516	896
K	4	448	896
L	1	220	896
M	8	696	896
N	3	376	896
O	7	640	896
P	8	696	896
Q	8	696	896
R	7	640	896
Total		5 828	8 960
Concordance		65.0%	

Total + **25**
Total - **95**

Level L1

Laboratories number 15

Number of positive results per laboratory: 8

Lab.	Number of positive results	Interlaboratories pairs with the same result	Total interlaboratories pairs number
A	8	896	896
C	8	896	896
E	8	896	896
F	8	896	896
H	8	896	896
I	8	896	896
J	8	896	896
K	8	896	896
L	8	896	896
M	8	896	896
N	8	896	896
O	8	896	896
P	8	896	896
Q	8	896	896
R	8	896	896
Total		8 960	8 960
Concordance		100.0%	

Total + **120**
Total - **0**

Level L2

Laboratories number 15

Number of positive results per laboratory: 8

Lab.	Number of positive results	Interlaboratories pairs with the same result	Total interlaboratories pairs number
A	8	896	896
C	8	896	896
E	8	896	896
F	8	896	896
H	8	896	896
I	8	896	896
J	8	896	896
K	8	896	896
L	8	896	896
M	8	896	896
N	8	896	896
O	8	896	896
P	8	896	896
Q	8	896	896
R	8	896	896
Total		8 960	8960
Concordance		100.0%	

Total + **120**
Total - **0**