

# Fapas® – Food Microbiology

## INSTRUCTIONS FOR THE PREPARATION OF SAMPLES

### Notes

Find the Product Matrix Code appropriate to your sample by logging in at [fapas.com](http://fapas.com) and clicking 'Go to Results' then looking at the second half of the Product Code.

Prepare your sample according to Sample Preparation Procedure (A to J) shown for that Product Matrix Code.

Product Matrix Code	Sample Preparation Procedure
AFE1	B
CCP22	A
CCP28	B
Flour (detection of E. coli 0157:H7)	B
CCP28	C
Flour (enumeration of Yeasts and Moulds)	C
CON2	C
CON3	C
DRN17	F
DRN29	I
DRN41	J
DRY7	G
DRY14	B
DRY18	H
EGG3	A
INF10	C
MRP2	A
MRP14	A
MRP35	A
MRP47	A
NUT12	C
NUT30	C
PFO9	A
PRO40	A
SEA11	A
SEA20	A
SEA28	A
SPI11	C
SPI17	C
UNF11	D
UNF12	E
VEG47	A
VEG61	A
VEG71	A
VEG88	A

## INSTRUCTIONS FOR THE PREPARATION OF SAMPLES

**Procedure A**

**Beef, Chicken, Meat, Fish, Herbs (parsley), Egg, Salad, Rice, Mixed vegetables, Sprouting Seeds and Lettuce, Prawns, Pet Food and Ready To Eat (RTE) Meal**

These samples require a **rehydration** stage before you start the analysis.

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the container thoroughly.**

For each sample for an **ENUMERATION test**: add 10 ml (+/- 0.2 ml) buffered peptone water at room temperature.

**Important Note:** this gives you a sample which is equivalent to 10 g of a routine sample.

For each sample for a **DETECTION test EXCEPT for *Vibrio parahaemolyticus***: add 20 ml (+/- 0.2 ml) buffered peptone water at room temperature.

**Important Note:** this gives you a sample which is equivalent to 25 g of a routine sample.

For each sample for a **DETECTION test ONLY for *Vibrio parahaemolyticus***: add 20 ml (+/- 0.2 ml) **ASPW** (Alkaline Saline Peptone Water) or equivalent at room temperature.

**Important Note:** this gives you a sample which is equivalent to 25 g of a routine sample.

Then:

- Gently invert the sample a few times to aid rehydration.
- Leave the sample to stand at room temperature for 30 minutes (+/- 2minutes).

The sample is now ready to test using your usual procedure.

**Procedure B**

**Flour (detection of *E. coli* 0157:H7), Milk Powder and Animal Feed Test Materials**

These samples require a **resuscitation** stage before you start the analysis.

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the container thoroughly.**

Add the sample to the blender / homogeniser bag.

For each sample for an **ENUMERATION test**: add 90 ml (+/- 2 ml) of your usual diluent at room temperature, rinsing the sample container with part of the diluent.

**Important Note:** this makes a 1/10 dilution.

For each sample for a **DETECTION test**: add 225 ml (+/- 5 ml) of your usual pre-enrichment / enrichment broth at room temperature, rinsing the sample container with part of the broth.

**Important Note:** this makes a 1/10 dilution.

Then:

- Leave the sample to stand at room temperature for 30 minutes (+/- 2 minutes).

The sample is now ready to test using your usual procedure.

## Procedure C

### Section 1 - Flour (enumeration of Yeasts and Moulds), Ground Pepper, Chocolate, Chocolate Powder, Spices, Nuts and Infant Formula

These samples can be analysed without any special preparation.

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the container thoroughly.**

For each sample for an **ENUMERATION test** OR a **DETECTION test**.

The sample is ready to test using your usual procedure.

### Section 2 - Detection of Enterobacteriaceae, Coliforms and *Escherichia coli* in Infant Formula

- 1) Carefully remove the crimp cap of the small glass vial and discard it. Then aseptically remove the rubber bung and discard it.
- 2) Reconstitute each of the test materials by adding 1 ml of BPW to the glass vial and allow to rehydrate for 2 minutes.
- 3) Transfer the cocktail from the small glass vial into 90ml BPW, rinse the glass vial with the 90ml BPW to make sure all the solution is extracted.
- 4) Amalgamate the 10g infant formula from the plastic container and the 90ml BPW into a stomacher bag and stomach for 2 minutes.

The sample is ready to test using your usual procedure.

## Procedure D

### Swab (Sponge) for Detection and Enumeration

These samples require a **rehydration** stage before you start the analysis.

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the container thoroughly.**

Add 10 ml (+/- 0.2 ml) buffered peptone water at room temperature directly to the sponge in the container.

Then:

- Leave the sample to stand at room temperature for 30 minutes (+/- 2 minutes).

For the **ENUMERATION test**: Transfer the sample into a sterile stomacher bag with 90ml of non-selective pre-enrichment broth. You can use sterile forceps if necessary. Rinse the container and homogenise the sample using the stomacher. Please consider this as your first dilution.

The sample is now ready to test using your usual procedure.

### Procedure E

#### Swab (Cotton)

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the container thoroughly.**

Add 10 ml (+/- 0.2 ml) buffered peptone water at room temperature to the sample and vortex thoroughly for 30 seconds.

Then:

- Leave the sample to stand at room temperature for 30 minutes (+/- 2 minutes) to rehydrate.
- Vortex the sample for 10 seconds.

The sample is now ready to test using your usual procedure.

### Procedure F

#### Fruit Juice

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the vial thoroughly.**

Add 1 ml (from a 10ml (+/- 0.2 ml) aliquot) of buffered peptone water at room temperature to the sample vial.

Then:

- Leave the sample to stand at room temperature for 1 minute (+/- 10 seconds).
- Carefully rinse the vial contents twice using a pastette (Pasteur pipette).
- Transfer the full contents from the vial into the 10ml buffered peptone water (from which the initial 1ml amount was taken) to give a final volume of 10ml (+/- 0.2 ml).

The sample is now ready to test using your usual procedure.

## Procedure G

### Cheese

These samples require a **rehydration** stage before you start the analysis.

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the container thoroughly.**

For each sample for an **ENUMERATION test**: add 10 ml (+/- 0.2 ml) buffered peptone water at room temperature.

**Important Note:** this gives you a sample which is equivalent to 10 g of a routine sample.

For each sample for a **DETECTION test** add 20 ml (+/- 0.2 ml) buffered peptone water at room temperature.

**Important Note:** this gives you a sample which is equivalent to 25 g of a routine sample.

Then:

- Gently invert the sample a few times to aid rehydration.
- Leave the sample to stand at room temperature for 30 minutes (+/- 2minutes).

The sample is now ready to test using your usual procedure.

## Procedure H

### Soft Cheese (detection of *Listeria monocytogenes*)

These samples can be analysed without any special preparation.

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the container thoroughly.**

For each sample for an **ENUMERATION test** OR a **DETECTION test**.

The sample is ready to test using your usual procedure.

## Procedure I

### Soft Drink

These samples require a **rehydration** stage before you start the analysis.

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the container thoroughly.**

Add 1 ml from the 100ml simulated soft drink provided into the vial. Please ensure that the diluent used is at room temperature.

Then:

- Leave the sample to stand at room temperature for 1 minute ( $\pm 10$  seconds).
- Carefully rinse the vial contents twice with the simulated soft drink using a pastette.
- Transfer the full contents from the vial into the 100ml simulated soft drink from which the initial volume of 1ml was taken.
- Gently mix the prepared sample by inversion

The sample is now ready to test using your usual procedure.

## Procedure J

### Water (Bottled)

These samples require a **rehydration** stage before you start the analysis.

**TREAT EACH SAMPLE AS A WHOLE – DO NOT SUB-SAMPLE and ensure you rinse the containers thoroughly. Do NOT combine the test materials**

Carefully remove the crimp cap and discard it. Aseptically remove the rubber bung and discard it. Reconstitute each of the test materials by adding 1 ml of sterile deionised/distilled water to the glass vial.

Then:

- Leave the sample to stand at room temperature for 2 minute ( $\pm 10$  seconds).
- Dilute the resulting suspension to a final volume of 1000 ml  $\pm 20$  ml using your own sterile deionised / distilled water.
- Rinse the glass vial 2-3 times during this process using your sterile deionised / distilled water to ensure that all of the inoculum is added to the final 1000 ml  $\pm 20$  ml volume.
- Gently mix the prepared sample by inversion.

The sample is now ready to test using your usual procedure.