

Surface Sampling Solutions



Easy-to-use sterile specimen collection and surface sampling kits for quality control and identification of hazards at critical control points in food production and livestock farming applications.

The environment is a principal source of microbiological contamination within a food processing facility. At the same time, in livestock farming, the environment can indicate whether a farm safety program is functioning as it should. Environmental testing has therefore become a crucial part of any food and feed safety program.

With a strong focus on environmental testing, Romer Labs provides a broad range of sampling solutions covering both **food production** and **livestock farming applications**.

Environmental and Surface Sampling for Food Production Applications

Dry and pre-moistened sterile cellulose sponges are convenient, ready-to-use products. They eliminate the costly and time-consuming steps of diluent preparation, sterilization and application to the sampling devices. They are designed to make sampling microbes from surfaces in food processing facilities and industrial settings more convenient. Sterility is guaranteed by exposing sampling products to irradiation.

The use of different pre-moistening solutions enables a broad range of environmental and product (carcass) sampling applications.

Available pre-moistening solutions:

Dey-Engley (DE) Neutralizing Broth (NB) – DE neutralizing broth assists in the recovery of microorganisms in samples taken from surfaces exposed to sanitizing agents. It neutralizes the bactericidal and bacteriostatic effects of sanitizing agents such as chlorine, quaternary ammonium compounds, iodine, phenolics, mercurials, formaldehyde and glutaraldehyde. The medium also contains nutritive agents that aid in recovering and promoting the growth of microorganisms. Bromocresol purple is present in the broth as a colorimetric indicator.

Neutralizing Buffer – The neutralizing buffer assists in the recovery of microorganisms in samples taken from surfaces exposed to sanitizing agents. Of a different color from DE neutralizing broth, it offers the same neutralizing effect but does not include nutrition for the growth of microorganisms. It is therefore classified as a buffer instead of a broth.

Buffered Peptone Water (BPW) – Buffered Peptone Water is a pre-enrichment medium useful in isolating *Salmonella* from foods. During many food processes, *Salmonella* and other species can suffer sub-lethal injury from processes involving heat, desiccation, preservatives, pH changes or osmotic pressure shifts. The use of media such as BPW before selective media has been shown to facilitate the resuscitation of injured cells and provides results superior to those derived from a direct selection method.

Neutralizing Buffered Peptone Water (nBPW) – The USDA-FSIS began recommending nBPW for domestic and imported poultry verification in 2016. It will replace BPW as a sampling broth for *Salmonella* and *Campylobacter* and acts if an antimicrobial intervention should affect pathogen survival.

Lethen Broth (LB) – Lethen broth is a highly nutritional medium that contains lecithin and Tween 80. It is used for testing the efficacy of sanitizing protocols as lecithin neutralizes quaternary ammonium compounds while Tween 80 neutralizes phenols, hexachlorophene and formalin.

Butterfield's Buffer (BPB) – This Phosphate buffer (pH 7.2) was developed to provide a standardized medium for the preparation of sampling. It eliminates the variations in pH associated with the use of distilled water. The American Public Health Association (APHA) and the Association of Official Analytical Chemists (AOAC) recommend it for surfaces where no disinfectant residues are suspected.

Maximum Recovery Diluent (MRD) - Maximum Recovery Diluent is formulated as recommended by ISO 18593 for use as a diluent for general purpose. It is also known as Peptone salt solution (0.1% Peptone, 0.8% NaCl).

Sponge-Stick

- 3" x 1.5" (7.5 x 3.5 cm) biocide-free cellulose sponge
- Unique, quick sponge-release handle for fast and convenient sponge release
- Thumb stop in-handle included to avoid accidental sponge contact
- No gloves needed for different sampling sites
- Perfectly suited to sample in gaps, drains and pipes
- Dry or pre-moistened with 10 ml buffer
- Bags can be opened easily with attached pull tabs
- Label area for sample identification
- Irradiated for proven sterility



Available in three versions:

1. Sponge-Stick in vapor-barrier aluminum foil pouch for long shelf life with 2 years from production (includes also sterile twirl-tie bag; 24 oz 5.5" x 9")
2. Sponge-Stick placed in twirl-tie bag with 9 months shelf life from production
3. Sponge-Stick with dry sponge (# 10003705) placed in twirl-tie bag with 5 years shelf life from production

Procedure:



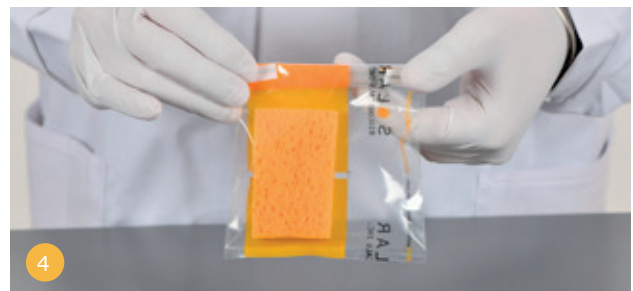
1 Tear pouch or bag open and remove handle from (sponge attached) with gloved hand.



2 Collect sample by vigorously rubbing sponge on target area. (e.g. 30 x 30 cm, 1 x 1 ft.).



3 Release sponge from the quick release handle into the twirl-tie bag provided, by pulling the clip back.



4 Close the twirl-tie bag with the wires attached and label it. No switching of gloves between sampling sites needed.

Package Size	Description	Item No.	
		In aluminum foil (incl. sterile twirl-tie bag)	In twirl-tie bag
	Pre-moistened with 10 ml		
100	Neutralizing buffer (NB)	10003700	10003707
100	Dey-Engley neutralizing broth (DE)	10003698	10003704
100	Lethen broth (LB)	10003699	10003706
100	Buffered peptone water (BPW)	10003697	10003703
100	Neutralizing buffered peptone water (nBPW)	10003701	10003708
100	Butterfield's phosphate buffer (BPB)	10003696	10003702
100	Dry		10003705

Sponge

- 3" x 1.5" (7.5 x 3.5 cm) biocide-free cellulose sponge
- Available dry or pre-moistened with 10 ml buffer
- Vapor-barrier foil pouch offers long shelf-life
- Kit includes also a sterile twirl-tie bag (24 oz; 5.5" x 9") and a pair of sterile plastic gloves
- Bags can be opened easily with attached pull tabs
- 2 years shelf-life from production (dry sponge 5 years)
- Label area for sample identification
- Irradiated for proven sterility



Sponge in Vial

- 3" x 1.5" (7.5 x 3.5 cm) biocide-free cellulose sponge
- Pre-moistened with 10 ml buffer
- In a 120 ml plastic screw-cap vial
- 12 months shelf-life from production
- Label attached for sample identification



Procedure:



1 Tear pouch open or open the vial and remove sponge with gloved hand.



2 Collect sample by vigorously rubbing sponge on targeted area (e.g. 30 x 30 cm, 1 x 1 ft.).



3 Put sponge into the sterile sample bag (or back into the vial) and label bag with sample details. Always switch gloves between sampling sites.

Package Size	Description	Item No.		
	100 pcs. Sponge pre-moistened with 10 ml of	Sponge only	Kit (incl. twirl-tie bag & gloves)	Sponge in Vial
100 (Kit: 50)	Neutralizing buffer (NB)	10001901	10001895	10003755
100 (Kit: 50)	Dey-Engley neutralizing broth (DE)	10001899	10001893	10003753
100 (Kit: 50)	Lethen broth (LB)	10001900	10001894	10003754
100 (Kit: 50)	Buffered peptone water (BPW)	10001898	10001892	10003752
100 (Kit: 50)	Neutralizing buffered peptone water (nBPW)	10001902	10001896	10003701
100 (Kit: 50)	Butterfield's phosphate buffer (BPB)	10001897	10001891	10003751
100	Dry (in twirl-tie bag)	10002325		

Environmental Sampling for Livestock Farming Applications

Salmonella and *Campylobacter* contamination of poultry and other livestock products is a worldwide concern. To reduce instances of contamination at farms, methods for monitoring *Salmonella* and *Campylobacter* contamination in livestock shelters, beginning with drag swab sampling, have been developed by the USDA-FSIS (Food Safety Inspection Service). Drag swab kits are sterile sampling devices used to sample poultry litter for pathogenic organisms such as *Salmonella*. Alternative boot swabs are also used as stated in various EU regulations (e.g. Regulation of the Commission No. 2160/2003, 213/2009, 200/2010, 517/2011, 200/2012 and 1190/2012) to meet this objective.

Sterile Boot Cover Swab

- 5.9" x 5.9" (15 x 15 cm) biocide-free cotton-polyester blend fabric sewn in a sock shape
- Integrated elastic band sewn into the top in order to aid in securing it to the boot.
- Dry or pre-moistened with either skim milk or buffered peptone water
- Packaged in a twirl-tie lab bag
- Bags can be opened easily with attached pull tabs
- Label area for sample identification
- Irradiated for proven sterility



Procedure:



Slip a disposable plastic boot cover to prevent cross-contamination or use a dedicated boot from the target barn.



Tear open twirl-tie bag and remove pre-moistened boot swab from it and place it securely over your boot.



Walk through the livestock facility according to your sampling plan.



Remove boot swab and return it to its original twirl-tie bag. Seal bag and label sample.

Boot Cover Swabs in 24 oz. (0.7 L) Twirl-Tie Bag, sterile 5.5" x 9" (14 x 23 cm)

Package Size	Description	Item No.
100	pre-moistened with skim milk - single	10001906
100	pre-moistened with skim milk - pair	10001910
100	pre-moistened with BPW - single	10001904
100	pre-moistened with BPW - pair	10001907
100	dry - single	10001905
100	dry - pair	10001908

Boot Cover Swabs (according to EU Commission Regulation) in 55 oz. (1.62 L) Twirl-Tie Bag, sterile 7.5" x 12" (19 x 30 cm)

Package Size	Description	Item No.
100	pre-moistened with BPW – pair	10001911
100	pre-moistened with BPW – 2 pairs	10001913
50	pre-moistened with BPW – 2 + 3 pairs	10001914

Ready-to-Use Kits in Zipper Bags (according to EU Commission Regulation):**Boot Cover Swabs in 55 oz. (1.62 L) Twirl-Tie Bag, sterile 7.5" x 12" (19 x 30 cm)**

+ 2 Plastic Boot Covers (Item No. 10004591) + 2 Gloves

Package Size	Description	Item No.
50	pre-moistened with BPW – pair	10001912
50	pre-moistened with BPW – 2 pairs	10004588
50	pre-moistened with BPW – 2 + 3 pairs	10004590

Plastic Boot Covers

Package Size	Description	Item No.
200	Plastic boot cover with elastic band	10004591
50	Plastic boot cover (oversize)	10001917

Fabric Swabs (according to EU Commission Regulation, 28 x 35 cm, ≥ 900 cm²) in 55 oz. (1.62 L) Twirl-Tie Bag, sterile 7.5" x 12" (19 x 30 cm)

Package Size	Description	Item No.
200	Fabric Swab pre-moistened with MRD	10004589

Drag Swabs

- 12-ply 4" x 4" (10 x 10 cm) biocide-free cotton gauze or 3" x 1.5" (7.5 x 3.5 cm) biocide-free cellulose sponge
- Pre-moistened with 10 ml skim milk
- Packaged in foil pouches or 120 ml plastic screw-cap
- Shelf life of 24 months (in foil) or 12 months (in vial) from production
- With or without string attached (6 ft, 1.8 m)
- Twirl-tie bag (24 oz; 5.5" x 9") and gloves included (except # 10002378)
- Bags can be opened easily with attached pull tabs
- Irradiated for proven sterility
- Label area for sample identification



Procedure:



1 Remove drag swab from package and unwind free end of the string, allow swab assembly to unravel and fall to litter surface.



2 Secure string on belt or hold it by hand and drag swab over litter by walking through building.



3 Return swab to plastic vial or place it into the twirl-tie bag. Close cap or seal twirl-tie bag with attached wire and label sample.

Package Size	Description	Item No.
100	Drag Swabs - cotton gauze moistened in skim milk	10002371
100	Swabs - cotton gauze moistened in skim milk (no string)	10002373
100	Swabs - cotton gauze moistened in skim milk (no string, 3 per foil)	10002374
100	Drag Swabs - cellulose sponge moistened in skim milk	10002377
100	Drag Swabs - cotton gauze moistened in skim milk (in vial)	10002378

Miscellaneous Environmental Sampling Products

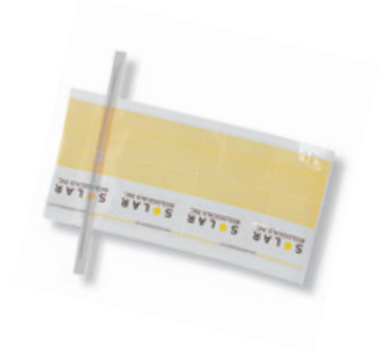
Sterile Gloves

- In convenient tear-open plastic pouch
- Packaged as a pair of gloves per pouch
- Irradiated for proven sterility



Sterile Sampling Bag

- Sterile 18 oz (0.5 L) or 24 oz (0.7 L) bags
- Twirl-tie style sample bags
- Label area for sample identification
- Bags can be opened easily with attached pull tabs
- Irradiated for proven sterility



Sterile Carcass Sampling Template

- 100 square cm (10 x 10 cm) or 50 square cm (10 x 5 cm)
- For carcass or surface sampling
- Made of rigid paperboard to withstand vigorous use
- Packaged in an easy-to-open plastic bag
- Irradiated for proven sterility



Package Size	Description	Item No.
100	100 cm ² template packaged in re-closable bag	10003780
100	50 cm ² template packaged in re-closable bag	10003786
50 pairs	Co-polymer gloves size XL packaged in peel open pouch	10002795
100	18 oz. (0.5 L) twirl tie sample bag, sterile 4.5" x 9"	10001883
100	24 oz. (0.7 L) twirl tie sample bag, sterile 5.5" x 9"	10001884
500	55 oz. (1.62 L) twirl tie sample bag, sterile 7.5" x 12"	10001886