



Sponge

For microbiological monitoring of all types of surfaces.

INTENDED PURPOSE

Liofilchem Sponge products are used for collecting surface samples to detect microbiological contamination even in the presence of traces of disinfectant.

DESCRIPTION

Wet Sponge consists of a transparent plastic bag containing a biocide-free sponge soaked in a liquid medium.

Wet Sponge Stick includes also a plastic rigid handle that allows to sample hard-to-reach areas.

Dry Sponge is available as well.

KIT CONTENT

- 10 zip bags of 10 bags, each with a sterile sponge, which can be dry or wet, with or without stick

Each sponge device undergoes gamma irradiation as a final manufacturing step.

METHOD PRINCIPLE

If the area to sample is wet, a dry sponge may be used, unless neutralizers are needed. A wet sponge shall be used when the area to sample is dry, except if moisture cannot be removed from the processing area. The use of moistened sponge is generally better to increase the recovery of microorganisms. Neutralizers may be included in the diluent or media used to soak the sponge to prevent any inhibitory effect of the disinfectants on the growth of microorganisms.

REAGENTS

- Sampling bag (28x15 cm)
- Compressed cellulose sponge (5x8 cm)
- Polystyrene stick (19x3 cm)
- Wet Sponge and Wet Sponge Stick are available with the following diluent/media:

Solutions	FORMULA (g/l)
Neutralizing Rinse Solution	Casein peptone 1.0 g, histidine 1.0 g, lecithin 3.0 g, polysorbate 80 30.0 g, sodium thiosulphate 5.0 g, sodium chloride 8.5 g, final pH 7.0 ± 0.2 at 25°C.
Maximum Recovery Diluent	Enzymatic digest of casein 1.0 g, disodium chloride 8.5 g, final pH 7.0 ± 0.2 at 25°C
Buffered Peptone Water	Enzymatic digest of casein 10.0 g, sodium chloride 5.0 g, disodium hydrogen phosphate 3.5 g, potassium dihydrogen phosphate 1.5 g, final pH 7.0 ± 0.2 at 25°C.
Lethen Broth	Meat extract 5.0 g, peptone 10.0 g, polysorbate 80 5.0 g, lecithin 0.7 g, sodium chloride 5.0 g, final pH 7.0 ± 0.2 at 25°C
D/E Neutralizing Broth	Enzymatic digest of casein 5.0 g, yeast extract 2.5 g, dextrose 10.0 g, sodium thioglycolate 1.0 g, sodium thiosulphate 6.0 g, sodium bisulfite 2.5 g, lecithin 7.0 g, polysorbate 80 5.0 g, bromocresol purple 0.02 g, final pH 7.6 ± 0.2 at 25°C

The various solutions may have high to low (or null) inhibitory effect of residual disinfectants depending on characteristics and concentration of neutralizing agents.

Table 1 below shows a list of chemical disinfectants and antiseptics and the ability of each medium/diluent to neutralize residual antimicrobial activity.

Solutions with no neutralizer(s) or moderate inhibitory effect can be preferred when no residual disinfectant is expected leading to a better recovery of injured/stressed cells.

Table 1. Examples of classes of sanitizers and suitable neutralizers.

SANITIZER CLASS	D/E Neutr. Broth	Letheen Broth	Neutr. Rinse Solution	Buffered Peptone Water	Maximum Recovery Diluent
Quaternary ammonium compounds	•	•	•		
Biguanides (chlorhexidine)	•	•			
Chlorine, bromine and iodine	•		•		
Peroxides	•	•			
Formaldehydes	•	•	•		
Glutaraldehyde	•		•		
Phenols	•	•			
Alcohols	•	•			
Acetic and lactic acids	•			•	

TEST PROCEDURE

1. Tear off the top of the bag along the perforations and take out the sterile sponge.
2. For Dry Sponge only: If needed, add an appropriate diluent/medium to hydrate the sponge.
3. Streak the sponge on a flat surface horizontally and vertically. For irregular surfaces, make sure to sample the entire described location or collect a representative sample.
4. Return the sponge back to the bag. Do not insert the handle when using sponge with stick: Hold sponge from the outside of the bag and bend the handle back and forth to break-off the sponge.
5. Twirl the bag around the wires, at least 3 times, to close the bag.
6. Fold both wire-ends onto the bag to provide airtight and leak-proof closure.
7. Send to a laboratory for carrying out microbiological tests.

Note: The delay between sampling and testing should be as short as possible and not longer than 48 h. The samples should be kept at 2-8°C until analysis.

STORAGE

Store at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

1 year.

QUALITY CONTROL

Appearance of sponge: Yellow to orange-yellow, free of impurities, may contain dark spots.

Expected Cultural Response:

Control strains	Inoculum	Incubation	Specification
<i>Escherichia coli</i> WDCM 00012	10 ³ -10 ⁴ CFU	45-60 min/ 20-25°C	± 30% colonies of original count
<i>Staphylococcus aureus</i> WDCM 00034			
<i>Listeria monocytogenes</i> 4b WDCM 00021(*)		1 h ± 5 min/ 20 ± 2°C	

*Strain used for control of BPW only.

Please refer to the actual batch related Certificate of Analysis (CoA).

PERFORMANCE CHARACTERISTICS

Performance testing of Wet Sponge was carried out using the QC strains listed above. The results obtained met the established criteria.

WARNING AND PRECAUTIONS

For professional use only. Operators must be trained and have certain experience. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

BIBLIOGRAPHY

See the references at the end of this document.

TABLE OF SYMBOLS

See the table of symbols at the end of this document.

ORDER INFORMATION

Product	Neutralizing solution	Packaging	Ref.
Wet Sponge	Neutralizing Rinse Solution	100 sponge devices	85801
Wet Sponge Stick		100 sponge devices	85851
Wet Sponge	Maximum Recovery Diluent	100 sponge devices	85802
Wet Sponge Stick		100 sponge devices	85852
Wet Sponge	Buffered Peptone Water	100 sponge devices	85803
Wet Sponge Stick		100 sponge devices	85853
Wet Sponge	Lethen Broth	100 sponge devices	85804
Wet Sponge Stick		100 sponge devices	85854
Wet Sponge	D/E Neutralizing Broth	100 sponge devices	85805
Wet Sponge Stick		100 sponge devices	85855
Dry Sponge	---	100 sponge devices	85800
Dry Sponge Stick		100 sponge devices	85850

Revision History

Revision	Release Date	Change Summary
0	2026-02-09	Document creation










This IFU document and the SDS are available from the online Support Center:

liofilchem.com/ifu-sds

References

1. EN ISO 11133:2014+Amd1:2018+Amd2:2020. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media.
2. ISO 18593:2018. Microbiology of the food chain – Horizontal method for surface sampling.
3. ISO 11290-1:2017. Microbiology of the food chain – Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp. – Part 1: Detection method.
4. ISO 11290-2:2017. Microbiology of the food chain – Horizontal method for the detection and enumeration of *Listeria monocytogenes* and *Listeria* spp. – Part 2: Enumeration method.
5. ISO 6887-1:2017. Microbiology of food the food chain – Preparation of test samples, initial suspension and decimal dilutions for microbiological examination – Part 1: General rules for the preparation of the initial suspension and decimal dilutions.
6. ISO 21528-1:2017. Microbiology of the food chain – Horizontal method for the detection and enumeration of Enterobacteriaceae – Part 1: Detection of Enterobacteriaceae.
7. ISO 21528-2:2017. Microbiology of the food chain – Horizontal method for the detection and enumeration of Enterobacteriaceae – Part 2: Colony-count technique.
8. ISO 6579-1:2017. Microbiology of the food chain – Horizontal method for the detection, enumeration and serotyping of *Salmonella* spp. – Part 1: Detection of *Salmonella* spp.
9. ISO 17604:2015. Microbiology of the food chain – Carcass sampling for microbiological analysis.
10. Dey B.P. and F.B. Engley Jr. (1995) Comparison of Dey and Engly (D/E) Neutralizing Medium to Lethen Medium and Standard Methods Medium recovery of *Staphylococcus aureus* from sanitized surfaces. J. Ind. Microbiol. 14:21-25.

Table of Symbols

	Batch code
	Catalogue number
	Manufacturer
	Use by
	Fragile, handle with care
	Temperature limitation
	Contains sufficient for <n> tests
	Consult instructions for use
	Do not reuse



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