



## Physiological Solution

For preparing suspensions or solutions.

### INTENDED PURPOSE

For use in procedures requiring an isotonic diluent.

### DESCRIPTION

Physiological Solution (saline) is an isotonic diluent used to maintain cell integrity and viability in procedures that require preparation of test suspension of organisms or to increase ionic strength in buffer and media.

For usage, refer to internal procedures or relevant regulations.

### TYPICAL FORMULA\*

(g/l)

Sodium Chloride	8.5
Final pH 7.0 ± 0.2 at 25°C	

### METHOD PRINCIPLE

This sterile solution of 0.85 % NaCl (w/v) in water provides osmotic protection for microbial cells. The solution does not promote microbial growth due to the absence of nutrients.

### MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as: inoculating loops, sterile cotton swabs, quality control organisms.

### TEST PROCEDURE

See appropriate test methods when preparing dilutions.

### INTERPRETING RESULTS

See specific references for details on use.

### STORAGE

Store at 2-30°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

2 years.

### QUALITY CONTROL

**Appearance of medium:** Limpid, without precipitate, colorless.

**Expected Cultural Response:**

Control strains	Inoculum	Incubation	Growth on Tryptic Soy Agar
<i>Escherichia coli</i> ATCC® 8739	10 <sup>3</sup> -10 <sup>4</sup> CFU	45-60 mins / 20 - 25°C	± 30% colonies of original count
<i>Staphylococcus aureus</i> ATCC® 25923			

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

### PERFORMANCE CHARACTERISTICS

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

**LIMITATIONS**

Invalid results can be caused by poor sample quality, improper sample collection, improper transportation, improper laboratory processing, or a limitation of the testing technology. The operator should understand the principles of the procedures, including its performance limitations, in advance of operation to avoid potential mistakes.

Do not suspend bacteria in any diluent for more than 30 minutes at room temperature, since death or multiplication may occur.

Use appropriate densitometer for lecture of suspension organisms in the plastic tube.

**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.

**See ordering info below.** There may be additional product ref. numbers as well. For an updated listing of available products, visit [liofilchem.com](http://liofilchem.com)

Product	Format		Packaging	Ref.
Physiological Solution	16x100mm Plastic Tube with screw cap and self-standing base		100 x 10 ml	26197P
			100 x 9 ml	26196P
			100 x 3 ml	24142P

**Revision History**

Revision	Release Date	Change Summary
0	2024-10-22	Document creation

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

[liofilchem.com/ifu-sds](http://liofilchem.com/ifu-sds)

## References

1. EN ISO 11133:2014+Amd1:2018. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media.
2. Versalovic, J., et al. Manual of Clinical Microbiology. American Society for Microbiology, Washington, D.C.
3. Tille, P., et al. Bailey and Scott's Diagnostic Microbiology, C.V. Mosby Company, St. Louis, MO.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook, Vol. I, II & III. American Society for Microbiology, Washington, D.C.

## 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
	Keep away from sunlight



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