



## Physiological Solution

Isotonic diluent for preparing microbial suspensions.

### 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.

This solution is recommended by the Clinical and Laboratory Standards Institute (CLSI) and the European Committee on Antimicrobial Susceptibility Testing (EUCAST) to make bacterial suspensions and adjust turbidity for inoculum preparation. It is also used in the preparing of stock solutions and serial dilutions of antimicrobial agents.

### 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.

### TEST PROCEDURE

Solutions for inoculation should be prepared by inoculating the diluent with one to five isolated colonies of test organism. The suspension should be adjusted to the concentration of the appropriate McFarland inoculum standard.

### INTERPRETING RESULTS

See specific references for details on use.

### APPEARANCE

Clear, colorless.

### 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

5 years.

**QUALITY CONTROL**

The solution is inoculated with the microbial strains indicated in the QC table.

Inoculum for use as diluent:  $10^3$ - $10^4$  CFU.

Incubation conditions: 20-25°C for 45-60 minutes.

**QC Table.**

Microorganism		Growth on Tryptic Soy Agar
<i>Escherichia coli</i>	WDCM 00012	± 30% colonies of original count
<i>Staphylococcus aureus</i>	WDCM 00034	± 30% colonies of original count

**WARNING AND PRECAUTIONS**

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for professional use and must be used only by properly trained operators.

**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.

**The product is available in the various configurations listed below.** There may be additional product ref. numbers as well. For an updated listing of available products, visit [liofilchem.com](http://liofilchem.com)

Product Description	Format	Packaging	Ref.
Physiological Solution	Tube	20 x 3 ml tubes	24142
Physiological Solution	Vial	20 x 4.5 ml vials	20079
Physiological Solution	Vial	20 x 7 ml vials	20095
Physiological Solution	Tube	20 x 9 ml tubes	20196
Physiological Solution	Tube	20 x 10 ml tubes	20197
Physiological Solution	Tube	100 x 9 ml tubes	26196
Physiological Solution	Bottle	6 x 38 ml bottles	471130
Physiological Solution	Bottle	6 x 240 ml bottles	471120
Physiological Solution	Bottle	6 x 250 ml bottles (capacity 500 ml)	470400 ♦
Physiological Solution	Bottle	6 x 350 ml bottles (capacity 500 ml)	463250 ♦
Physiological Solution	Bottle	6 x 500 ml bottles	473000
Physiological Solution	Bottle	6 x 1000 ml bottles	463200

♦, not CE marked

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