

Buffered Saline Solutions

Pub. No. MAN0018562 Rev. 5.0



WARNING! Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](https://www.thermofisher.com/support).

Product description

Buffered saline solutions are isotonic saline solutions used to maintain pH and osmotic balance as well as to provide cells with water and essential inorganic ions. Buffered saline solutions are used in a variety of laboratory applications, such as washing cells, transporting cells, as a diluent for biological samples, or for reagent preparation. Formulations without calcium and magnesium are required for rinsing chelators from the culture before cell dissociation.

Contents and storage

All quality control testing results are reported on lot-specific Certificate of Analysis available on our website: [thermofisher.com](https://www.thermofisher.com).

Product	Cat. No.	Storage	Shelf life ^[1]
Phosphate Buffered Saline (PBS) 7.4 (1X)	10010001 ^[2] 10010002 ^[2]	15°C to 30°C	12 months
Phosphate Buffered Saline (PBS) 7.4 (1X)	10010023 ^[3] 10010031 ^[2] 10010049 ^[3] 10010072 ^[2]	15°C to 30°C	24 months
Phosphate Buffered Saline (PBS) 7.4 (1X)	10010015 ^[4]	15°C to 30°C	36 months
Phosphate Buffered Saline (PBS) 7.2 (1X)	20012019 ^[4] 20012068 ^[4]	15°C to 30°C	36 months
Phosphate Buffered Saline (PBS) 7.2 (1X)	20012027 ^[2] 20012043 ^[2] 20012050 ^[2] 20012099 ^[2]	15°C to 30°C	24 months
Phosphate Buffered Saline (PBS) 7.4 (10X)	70011036 ^[4] 70011044 ^[2] 70011069 ^[2]	15°C to 30°C	24 months
Phosphate Buffered Saline (PBS) 7.2 (10X)	70013016 ^[4]	15°C to 30°C	36 months
Phosphate Buffered Saline (PBS) 7.2 (10X)	70013032 ^[2] 70013073 ^[2]	15°C to 30°C	24 months

Product	Cat. No.	Storage	Shelf life ^[1]
Dulbecco's Phosphate Buffered Saline (DPBS) (1X) [+] Calcium Chloride [+] Magnesium Chloride	14040083 ^[4] 14040091 ^[4] 14040141 ^[2] 14040133 ^[2] 14040117 ^[3] 14040097 ^[2] 14040182 ^[2] 14040216 ^[3]	2°C to 8°C	36 months
Dulbecco's Phosphate Buffered Saline (DPBS) (1X) [-] Calcium Chloride [-] Magnesium Chloride	14190086 ^[4] 14190094 ^[4] 14190144 ^[3] 14190136 ^[3] 14190230 ^[4] 14190250 ^[3] 14190235 ^[3]	15°C to 30°C	36 months
Dulbecco's Phosphate Buffered Saline (DPBS) (1X) [-] Calcium Chloride [-] Magnesium Chloride	14190342 ^[3] 14190359 ^[2] 14190367 ^[3]	15°C to 30°C	12 months
Dulbecco's Phosphate Buffered Saline (DPBS) (1X) [-] Calcium Chloride [-] Magnesium Chloride	14190240 ^[4]	15°C to 30°C	24 months
Dulbecco's Phosphate Buffered Saline (DPBS) (10X) [-] Calcium Chloride [-] Magnesium Chloride	14200059 ^[4] 14200067 ^[4] 14200075 ^[2] 14200166 ^[2]	15°C to 30°C	36 months
Dulbecco's Phosphate Buffered Saline (DPBS) (10X) [+] Calcium Chloride [+] Magnesium Chloride	14080048 ^[4] 14080055 ^[2] 14080098 ^[2]	2°C to 8°C	24 months
Hanks' Balanced Salt Solution (HBSS) (1X) [+] Calcium Chloride [+] Magnesium Chloride [-] Phenol Red	14025050 ^[4] 14025092 ^[2] 14025076 ^[3] 14025134 ^[2] 14025126 ^[2]	15°C to 30°C	36 months
Hanks' Balanced Salt Solution (HBSS) (1X) [+] Calcium Chloride [+] Magnesium Chloride [+] Phenol Red	24020083 ^[4] 24020091 ^[4] 24020117 ^[2] 24020198 ^[2]	15°C to 30°C	36 months
Hanks' Balanced Salt Solution (HBSS) (1X) [-] Calcium Chloride [-] Magnesium Chloride [-] Magnesium Sulfate [+] Phenol Red	14170120 ^[2] 14170112 ^[2] 14170097 ^[2] 14170161 ^[2]	15°C to 30°C	36 months

Product	Cat. No.	Storage	Shelf life ^[1]
Hanks' Balanced Salt Solution (HBSS) (1X) [-] Calcium Chloride [-] Magnesium Chloride [-] Magnesium Sulfate [-] Phenol Red	14175046 ^[4] 14175053 ^[4] 14175095 ^[2] 14175079 ^[2] 14175103 ^[2] 14175145 ^[2]	15°C to 30°C	36 months
Hanks' Balanced Salt Solution (HBSS) (1X) [-] Calcium Chloride [-] Magnesium Chloride [+] Phenol Red [+] Sodium Bicarbonate	14170070 ^[4] 14170088 ^[4]	15°C to 30°C	36 months
Hanks' Balanced Salt Solution (HBSS) (10X) [-] Sodium Bicarbonate	14060040 ^[4]	15°C to 30°C	36 months
Hanks' Balanced Salt Solution (HBSS) (10X) [-] Calcium Chloride [-] Magnesium Chloride	14180046 ^[4]	15°C to 30°C	36 months
Hanks' Balanced Salt Solution (HBSS) (10X) [-] Calcium Chloride [-] Magnesium Chloride [-] Sodium Bicarbonate [-] Phenol Red	14185045 ^[4]	15°C to 30°C	24 months
Hanks' Balanced Salt Solution (HBSS) (10X) [-] Sodium Bicarbonate [-] Phenol Red	14065056 ^[2] 14065098 ^[2]	15°C to 30°C	24 months
Hanks' Balanced Salt Solution (HBSS) (10X) [-] Sodium Bicarbonate [-] Phenol Red	14065049 ^[4]	15°C to 30°C	36 months
Hanks' Balanced Salt Solution (HBSS) (10X) [-] Calcium Chloride [-] Magnesium Chloride [-] Magnesium Sulfate	14185052 ^[2] 14185098 ^[2]	15°C to 30°C	24 months
Earle's Balanced Salt Solution (EBSS) (1X) [-] Calcium Chloride [-] Magnesium Chloride [-] Phenol Red	14155048 ^[4] 14155063 ^[2] 14155098 ^[2]	15°C to 30°C	36 months

Product	Cat. No.	Storage	Shelf life ^[1]
BME, Basal Medium (Eagle) (1X) [+] Earle's Salts [+] Phenol Red [-] L-glutamine [-] HEPES	41010026 ^[4]	2°C to 8°C Protect from light	12 months
HEPES Buffer Solution 1 M	15630049 ^[4] 15630056 ^[4] 15630106 ^[2] 15630130 ^[2] 15630080 ^[3]	2°C to 8°C	24 months

^[1] Shelf life is determined from Date of Manufacture. Do not use beyond the labelled expiration date.

^[2] Manufacturer: Life Technologies Corporation | 3175 Staley Road | Grand Island, New York 14072 USA

^[3] Dual manufactured.

^[4] Manufacturer: Life Technologies Ltd3 Fountain DriveInchinnan Business ParkPaisley PA49RFScotland, United Kingdom

Guidelines for use

Buffered saline solutions have many different uses in cell culture protocols such as cell washing, diluents or as research sample holding solution.

Live cellular suspensions prepared in a buffered saline solution should not be stored longer than several hours, as cellular viability may decrease. Therefore, the suitability of the buffered saline solution for a specific cell type should be tested prior to use.

Quality control

Standard evaluations for buffered saline solutions are pH, osmolality, endotoxins and sterility testing for liquid products.

All quality control testing results are reported on lot specific Certificate of Analysis available on our website: thermofisher.com.

Labeling symbols

For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale at www.thermofisher.com/us/en/home/global/terms-and-conditions.html. If you have any questions, please contact Life Technologies at www.thermofisher.com/support.

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Where noted, products labeled "Dual manufactured products" were manufactured at both locations.

Revision history: Pub. No. MAN00185625.0

Revision	Date	Description
5.0	13 November 2023	Added SKUs 20012068 and 15630080.
4.0	14 March 2022	<ul style="list-style-type: none"> The regulatory label was changed to "For Research Use or Further Manufacturing. Not for diagnostic use or direct administration into humans or animals." The content required by previous IVD label was deleted or updated. The document type was changed to Product Information Sheet to reflect changed scope of the document.
3.0	30 June 2021	SKU 15630106 and 15630130 were added to HEPES Buffer Solution 1 M.
2.0	28 July 2020	The superscript (2) for SKU 14025076 was changed to a superscript (3) to indicate that the product is now dual-manufactured in GI and Inchinnan.
1.0	12 November 2019	New document for Buffered Saline Solutions.

The information in this guide is subject to change without notice.

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