

Bioprocessing

Enhance bioprocessing efficiency with ready-to-use balanced salt solutions

Introduction

Gibco™ balanced salt solutions are sterile-filtered, packaged in bioprocess containers, and ready to order. Sourcing Gibco balanced salt solutions can help streamline your buffer preparation, allowing you to focus on additional critical steps in your biopharmaceutical processes.

Quality

We mix compendial-grade Gibco™ chemicals with the same bulk water used in our Gibco™ Water for Injection (WFI) for Cell Culture to produce balanced salt solutions that meet stringent expectations of the pharmaceutical, biopharma, and diagnostic industries. The balanced salt solutions are manufactured to CGMP (21 CFR Part 820) and ISO 13485 standards, promoting consistency and convenience for the bioprocessing pipeline.

Specifications

- Compendial-grade or equivalent raw materials
- Defined shelf life
- Primary packaging: Thermo Scientific™ Aegis™ 5-14 single-use bioprocess container
- Secondary packaging: rigid shipping container with appropriate dunnage
- Manufacturing facilities: ISO 13485–certified, CGMP-compliant to 21 CFR Part 820 standard

Product features

- Multiple formulations and concentrations available
- Available in a range of pack sizes (5 L, 20 L, 50 L, 100 L, and 200 L)
- Established products with set specifications are made to order
- Product standardization enables shorter times from inquiry to quote and shipment, compared to custom
- Readily accessible documentation for accelerated qualification

Benefits

- Reduces time spent preparing buffers in-house
- Mitigates space requirement for equipment storage
- Streamlines in-house processes related to formulation, hydration, testing, and validation
- Meets workflow needs across stages of development and manufacturing of biologicals

Optional customization

If you require additional concentrations, a specific raw material grade or supplier, and/or unique bioprocess containers, ask your Thermo Fisher Scientific representative about customization.

Table 1. Release testing data included in the Certificate of Analysis, shelf life, and storage conditions.

Description	Osmolality (mOsm/kg)	Appearance	Sterility	Endotoxin	pH range	Shelf life	Storage condition
PBS (1X), pH 7.4	218–315	Clear solution, free of precipitate	Negative	<0.25 EU/mL	7.3–7.5	12 months	15–30°C
PBS (10X), pH 7.4	2,800–3,100						
DPBS (1X), no calcium, no magnesium	270–300						
HBSS (1X), with Ca ²⁺ , Mg ²⁺ , phenol red	265–295						

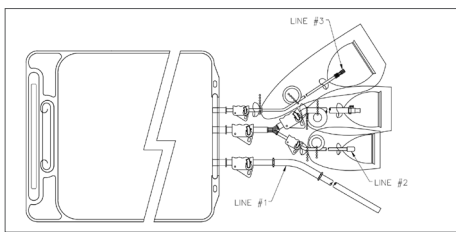


Figure 1. Design for 5 L and 20 L bioprocess containers.

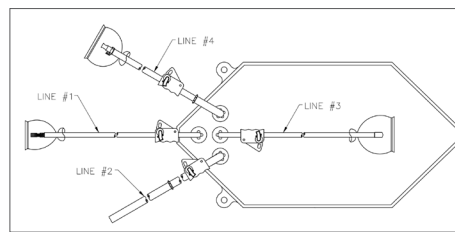


Figure 2. Design for 50 L, 100 L, and 200 L bioprocess containers.

Table 2. Specifications for primary packaging for balanced salts.

Bioprocess container design	Line	Tubing	Connectors
5 L and 20 L	1	C-Flex™ 374 tubing: 3/8 x 5/8 x 1/8 in. (ID x OD x wall thickness); length: 6 in. EVA tubing: 0.5 x 0.618 in. (ID x OD); length: 7 in.	Thermo Fisher Scientific fill line, sealed and cut on EVA tube
	2	C-Flex 374 tubing: 3/8 x 5/8 x 1/8 in. (ID x OD x wall thickness); length: 42 in. Y-connect to 1/4 x 3/8 x 1/16 in. (ID x OD x wall thickness); length: 36 in.	Polycarbonate quick connect, 3/8 in. insert (MPC) Polypropylene, Luer lock, male 1/4 in.
	3	C-Flex 374 tubing: 1/4 x 3/8 x 1/16 in. (ID x OD x wall thickness); length: 4 in. C-Flex 374 tubing: 1/8 x 1/4 x 1/16 in. (ID x OD x wall thickness); length: 36 in.	Polypropylene, Luer lock, female SmartSite™ needle-free valve port
50 L, 100 L, and 200 L	1	C-Flex 374 tubing: 1/4 x 1/2 x 1/8 in. (ID x OD x wall thickness); length: 48 in.	Polypropylene, Luer lock, female 1/4 in. SmartSite needle-free valve port
	2	Medical-grade PVC tubing: 1/2 x 5/8 x 1/16 in. (ID x OD x wall thickness); length: 60 in.	Thermo Fisher Scientific fill line, sealed and cut on PVC
	3	C-Flex 374 tubing: 1/4 x 1/2 x 1/8 in. (ID x OD x wall thickness); length: 48 in.	Polypropylene, Luer lock, male 1/4 in.
	4	C-Flex 374 tubing: 1/2 x 3/4 x 1/8 in. (ID x OD x wall thickness); length: 3 in. C-Flex 374 tubing: 3/8 x 5/8 x 1/8 in. (ID x OD x wall thickness); length: 36 in.	Polycarbonate quick connect, 3/8 in. insert (MPC)

Ordering information

Cat. No.	Description	Quantity
A58313BA	1X PBS, pH 7.4	5 L
A58313BB		20 L
A58313BD		50 L
A58313BE		100 L
A58313BC		200 L
A59065BA	10X PBS, pH 7.4	5 L
A59065BB		20 L
A59065BC		50 L
A59065BD		100 L
A59065BE		200 L
A59095BA	1X DPBS, no Ca ²⁺ , no Mg ²⁺	5 L BPC
A59095BB		20 L BPC
A59095BC		50 L BPC
A59095BD		100 L BPC
A59095BE		200 L BPC
A59772BA	1X HBSS, with Ca ²⁺ , Mg ²⁺ , phenol red	5 L BPC
A59772BB		20 L BPC
A59772BC		50 L BPC
A59772BD		100 L BPC
A59772BE		200 L BPC

 Learn more at thermofisher.com/balanced-salts

gibco

For research use or further manufacturing. Not for diagnostic use or direct administration into humans or animals.

© 2023 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. C-Flex is a trademark of Saint-Gobain Performance Plastics. SmartSite is a trademark of CareFusion Corporation. **COL28081 1223**