

EX-CELL® Advanced CHO Feed 1

Chemically Defined, Animal-Component Free Feed for CHO Cells

CATALOG NO. 24367C / CATALOG NO. 24368C

Description

EX-CELL® Advanced CHO Feed 1 is a single part, feed with concentrated key raw materials. The formulation was developed using multivariate analysis of 10,000+ data points that included performance, physical, and safety design specifications. This feed is designed to be used in conjunction with EX-CELL® Advanced CHO Fed-batch Medium for superior titer performance in fed-batch cultures on all industrial CHO cell lineages (CHO-S, DuxB11, DG44, CHO-M, CHO-K1, and CHOZN® GS).

Intended Use

This product is intended for research or further manufacturing but not for human or therapeutic use.

Product Preparation & Storage

Do not use if hydrated feed is cloudy or contains precipitates. Use aseptic technique when handling or supplementing this medium. Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

Hydration Instructions

Storage at 2–8 °C until use

Minimize exposure to light during preparation.

1. Measure approximately 80% of final required volume of Milli-Q® or similar cell culture grade water. Recommended water temperature should be 25 °C to 40 °C. While stirring, slowly add the powder at 64.1 g/L for Cat. No. 24367C, and 34.1 g/L for Cat. No. 24368C.

2. Continually stir for 30 minutes. Product will remain slightly turbid.
3. Raise pH to 9.5 +/- 0.1 using 5N NaOH. Continue mixing for 10 minutes. Product will be clear.
4. Lower pH to 8.5 using 5N HCl. Continue mixing for 10 minutes.
5. QS to 100% final volume.
6. Immediately sterile filter with low protein binding filter membrane (as recommended on page 2).
7. Store feed at 2–8 °C in the dark until use. Discard any unused feed after one month.

Methods for Use

Small-Scale Fed-batch Production

A titration (2.5–10%) of EX-CELL® Advanced CHO Feed 1 is strongly recommended to determine the optimal concentration for the specific process. For best results, it is recommended to initiate feeding only after reaching mid to late exponential phase.

1. Using clonal lines adapted into suspension culture, inoculate 30 mL of EX-CELL® Advanced CHO Fed-batch Medium (14366C) in a 125 mL Erlenmeyer shake flask or TPP® TubeSpin tube at an initial starting cell density of 0.3×10^6 cells/mL.
2. Feed cultures by aseptic addition of both sterile glucose (G8769) up to 4g/L of glucose (final concentration) and 5% of starting volume with hydrated EX-CELL® Advanced CHO Feed 1 (see above) on days 3, 5, 7, 9, and 11 post-inoculation.

Filters

The following sterilizing-grade filters (0.22 µm) may be used to filter the mixed feed:

Description	Application	Cat. No.
Opticap® XL Capsule with Millipore Express® SHC Membrane	Bacterial removal	KHGES015FF3
Opticap® XL Capsule with Millipore Express® SHC Membrane	Mycoplasma and bacteria removal	KHVES015FF3
Viresolve® Barrier Capsule	Virus, mycoplasma, and bacteria removal	VBKG005TC1

How to Order

EX-CELL® Advanced CHO Feed 1	Amount of Powder (g/L)	Cat. No.
Powder with Glucose	64.1	24367C
Powder without Glucose	34.1	24368C

For additional information, please contact your Regional representative, call Customer Service, or visit our website at:

SigmaAldrich.com/CHOperformance

To place an order or receive technical assistance

In the U.S. and Canada, call toll-free 1-800-645-5476

For other countries across Europe and the world, please visit:

EMDMillipore.com/offices

For Technical Service, please visit: **EMDMillipore.com/techservice**

EMDMillipore.com

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