SAFC®
Pharma & Biopharma Raw Material Solutions



# EX-CELL® Advanced CHO Feed 1

## Ch emically 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 x $10^6$ 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.



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## 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 Europe, please call Customer Service:

France: 0825 045 645
Germany: 069 86798021
Italy: 848 845 645
Spain: 901 516 645 Option 1
Switzerland: 0848 645 645
United Kingdom: 0870 900 4645

For other countries across Europe, please call: +44 (0) 115 943 0840

Or visit: **MerckMillipore.com/offices**

For Technical Service visit: **MerckMillipore.com/techservice**

**MerckMillipore.com**

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