



## AltairCHO Feed

### Chemically Defined High Performance Feed

**AltairCHO Feed** is a chemically-defined high performance feed designed for the high density suspension culture of Chinese Hamster Ovary (CHO) cell lines (e.g. CHO-K1, CHO-DG44, CHO-S). It is free of any animal-origin components, hydrolysates, and components of unknown composition. This feed supports the high level expression of recombinant proteins and therapeutic antibodies. When used in conjunction with OPM's basal media and highly concentrated feeds, it promotes improved cell growth, viability and can significantly boost the expression level of the target molecule.

### Application

AltairCHO Feed is intended for large-scale manufacturing of therapeutic biomolecules and for research purposes. It is not intended for use in humans, diagnostic procedures, or therapeutic purposes.

### Storage & Transportation

Store at 2-8°C in a dry environment and protected from light

Liquid media is shipped at room temperature and dry powder media on blue ice

### Shelf Life

AltairCHO Feed Liquid: 12 months

AltairCHO Feed Powder: 24 months

### Reconstitution Protocol for AltairCHO Feed Powder

1. Fill a clean mixing vessel to 75% of the final volume with high quality purified water at room temperature (25°C to 35°C), such as WFI at ambient temperature. For example, to prepare 1 liter of AltairCHO Feed, start with 750 mL of water. Start mixing.
2. Add AltairCHO Feed DPM at 125.62 g/L slowly to the vessel, avoiding formation of clumps. Continue mixing for 20 minutes.
3. Add 5N NaOH slowly to increase the pH to 7.0. Continue mixing for 30 minutes. Solution should be clear at this point.
4. Adjust to the final volume with high quality purified water, such as WFI. Mix for an additional 20 minutes.
5. Measure final pH and osmolality.
6. Sterilize immediately by membrane filtration.
7. Label as "AltairCHO Feed".
8. Store the reconstituted feed at 2°C to 8°C with protection from light.



## Quality Specifications

Specifications	AltairCHO™ Feed Medium	AltairCHO™ Feed DPM
Appearance	Orange-red clear liquid	Off-white or light yellow powder
pH	6.8 – 7.5	6.8– 7.5
Osmolality (mOsm/kg)	1000 – 1300	1000 – 1300
Solubility	Not applicable	Good if reconstitution instructions are followed
Endotoxin (EU/mL)	<2.0	<2.0
Sterility test	Negative	Not applicable

## Cell Culture Parameters

Temperature: 37°C

Incubator settings: 80% humidity, CO<sub>2</sub>: 5-8%

Shaker speed: 110-150 rpm (amplitude: 50mm)

## Recommended Feed Strategy

Time	Description	Feeding Strategy
Day 0	Seed cells into OPM's basal media at a density of 0.5x10 <sup>6</sup> – 1.5x10 <sup>6</sup> viable cells/mL	None
Day 2-4	Add AltairCHO Feed and the highly concentrated feed CDFS36 when the cell density reaches 4.0x10 <sup>6</sup> – 6.0x10 <sup>6</sup> cells/mL	<b>AltairCHO Feed:</b> Add 3-6% of the initial culture volume <b>CDFS36:</b> Add 0.3-0.6% of the initial culture volume
Day 4-14/16	Add AltairCHO Feed and the highly concentrated feed CDFS36 every other day until termination of the culture	<b>AltairCHO Feed:</b> Add 3-6% of the initial culture volume <b>CDFS36:</b> Add 0.3-0.6% of the initial culture volume



## Ordering Information

### High Performance Feeds

Name	Cat No.	Format	Pack Size
AltairCHO Feed	C675219	Liquid	500mL
AltairCHO Feed DPM	C679332	Dry powder	10L / 50L

### Related Products:

### Cell Culture Base Media

Name	Cat No.	Format	Pack Size
VegaCHO™ Medium	P121662	Liquid	1000mL
VegaCHO™ DPM	P106390	Dry powder	10L / 50L / 1000L
AltairCHO® Medium	C673017	Liquid	1000mL
AltairCHO® DPM	C670226	Dry powder	10L / 50L / 1000L

### Highly Concentrated Feeds

Name	Cat No.	Format	Pack Size
CDFS36	C217836	Liquid	500mL / 1000mL
CDFS36 DPM	C672069	Dry powder	1L / 2L / 5L / 10L / 50L / 100L

### Cell Culture Supplements

Name	Cat No.	Format	Pack Size
OPM GAL+V2 Galactosylation Enhancer	S81912	Liquid	100mL / 1000mL
OPM-ACA Anti-clumping agent	S0907001	Liquid	100mL / 500mL / 1000mL