



## StarCHO Feed

### Chemically Defined High Performance Feed

**StarCHO 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

StarCHO 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

StarCHO Feed Liquid: 12 months

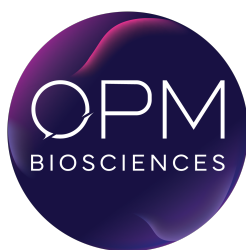
StarCHO Feed Powder: 24 months

### Reconstitution Protocol for StarCHO Feed Powder

1. Fill a clean mixing vessel to 80% 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 StarCHO Feed, start with 800 mL of water. Start mixing.

*Note: It is recommended to prepare a minimum of 1L each time.*

2. Add StarCHO Feed DPM at 170.54 g/L slowly to the vessel, avoiding formation of clumps. Mix for 20 minutes. The solution will remain cloudy after mixing but will clear upon pH adjustment in the next step.
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 "StarCHO Feed".



8. Store the reconstituted supplement at 2°C to 8°C with protection from light.

### Quality Specifications

Specifications	StarCHO™ Feed Medium	StarCHO™ 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 StarCHOFeed and the highly concentrated feed CDFS36 when the cell density reaches 4.0x10 <sup>6</sup> – 6.0x10 <sup>6</sup> cells/mL	<b>StarCHOFeed:</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 StarCHOFeed and the highly concentrated feed CDFS36 every other day until termination of the culture	<b>StarCHOFeed:</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
StarCHO™ Feed	P223635	Liquid	1000mL
StarCHO™ Feed DPM	P224028	Dry powder	10L

### Related Products:

### Cell Culture Base Media

Name	Cat No.	Format	Pack Size
StarCHO™ Medium	P225082	Liquid	1000mL
StarCHO™ DPM	P226718	Dry powder	10L / 50L / 100L

### 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