

HyClone™ Cell Boost™ 7b powder supplement

Instructions for Use

Product description

HyClone™ Cell Boost™ 7b powder is a chemically defined, powdered cell culture feed supplement without poloxamer 188, insulin, or L-glutamine. The supplement is hydrolysate-free and animal-derived component-free (ADCF). HyClone Cell Boost 7b contains no proteins, peptides, or growth factors.

Safety



CAUTION

Hazardous substances. When using hazardous chemicals, take all suitable protective measures, such as wearing protective clothing, glasses and gloves resistant to the substances used.

For use and handling of the product, refer to the Safety Data Sheet on cytiva.com.

Storage

Store the product in a tightly sealed container, in a dry environment, and protected from light at 2°C to 8°C.

Store the product in a locked location.

Shelf life

The following table gives information about the shelf life of the product when stored in a tightly sealed container at 2°C to 8°C and protected from light.

Supplement format	Shelf life
Powder	36 months
Liquid	12 months

Note: Refer to the product label for the expiry date.

Disposal

Dispose contents and container in accordance with all local and national regulations.

Preparation of the liquid supplement

The following sections describe the required materials and suggested protocol to hydrate the product from powder. The instructions apply for all filling sizes.

Required materials

Required equipment and materials include:

- Mixing vessel
- Stirrer

Note: A magnetic stirrer bar can be used for small-scale reconstructions up to 5 L. An overhead or bottom-mounted impeller is recommended for larger volumes.

- Calibrated pH meter
- Calibrated osmometer
- Cell culture-grade water

Hydrate the powder supplement



WARNING

High pH. Avoid spillage and wear protective glasses and other suitable Personal Protective Equipment (PPE). Solutions with high pH are corrosive and therefore dangerous to health.

Follow the steps below to hydrate the product from powder. The instructions apply for all filling sizes.

Step	Action
1	Fill a clean mixing vessel to 70% to 75% of the final volume with cell culture-grade water, at ambient temperature (18°C to 25°C). For example, start with 700 mL to 750 mL of water to prepare 1 L of hydrated supplement. Start stirring.
2	Add 94.6 g/L HyClone Cell Boost 7b powder slowly to the vessel, avoiding formation of clumps. Mix for 30 minutes. The solution will remain cloudy in this step, but should be clear of any clumps or dry powder residues.
3	Slowly add 160.5 mL/L of a 5 N NaOH solution or 80.25 mL/L of a 10 N NaOH solution and mix for 60 minutes. After this step, the solution will be clear.
4	Adjust the pH to between 11.0 and 11.4 by drop-wise addition of 5 or 10 N NaOH or HCl. After adjusting, continue stirring for an additional 60 minutes to make sure that all components are completely dissolved. Note: The pH will gradually decrease with longer mixing times. Use caution when adjusting pH. Over adjusting can cause the osmolality to be out of specification.
5	Adjust to the final volume with cell culture-grade water, and stir for an additional 10 minutes.

Step	Action
6	Measure and record the final pH and osmolality. Expected values: pH 11.0 to 11.4 Osmolality 218 to 266 mOsmol/kg (diluted 1:5)
7	Sterilize immediately by membrane filtration. Use a low-binding filter membrane type, such as PVDF or PES. The supplement is a clear colorless or slightly yellow liquid. The color will turn darker yellow to brown over time.
8	Store the hydrated supplement protected from light at 2°C to 8°C until use.

Technical support

Contact your local Cytiva representative to learn more about the services we offer. To find a certificate or SDS for a specific product, visit [cytiva.com/certificates](https://www.cytiva.com/certificates).



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