

# YeastSeq

## Sample Amounts and Concentrations

Sample	Shipping Condition	Amount / Concentration	Volume / Notes
Genomic DNA	Ambient Temperature	≥50 ng/μl	Use ≥20 μl for genomes ≤16 Mb Add 10 μl if Illumina Variant Analysis is desired
Cells	Ambient Temperature	~4 * 10 <sup>9</sup> cells per ml NAP* buffer	1 ml
Cells	Frozen	~ 4 * 10 <sup>9</sup> cells	or pellet from up to 10 ml of culture, if cell counts are not available

\* NAP buffer can be purchased from Microsynth.

## Sample Requirements

- **Quantification method:** Use fluorescence-based methods (e.g., Qubit). Avoid absorbance-based methods (e.g., Nanodrop), which may overestimate concentration.
- **DNA quality:** Ensure high-molecular-weight DNA (>30 kb) with no significant fragmentation.
- **DNA type:** Yeast DNA
- **Compliance:** Samples not meeting requirements may face processing delays, and complete sequencing or coverage cannot be guaranteed.

### Note:

We accept pellets from pure liquid cultures, yeast must be sensitive to zymolyase.  
For specialized offers or exceptions, please contact your sales representative.

## Sample Preparation

### ⚠ Important Biosafety Notice – BSL-2 Samples

Samples containing **BSL-2 (biosafety level 2) organisms must not be shipped using the standard NAP buffer method** or through Microsynth drop boxes, Packstations, or other unattended delivery points. The NAP buffer does not inactivate BSL-2 organisms, and such samples remain biologically active and potentially hazardous.

Customers are fully responsible for:

- **Correctly declaring the biosafety level of their samples in the webshop hazard declaration form.**
- **Ensuring BSL-2 samples are packaged, labeled, and shipped in full compliance with applicable biosafety and transport regulations.**
- **Consulting their local Biosafety Officer (BSO) or relevant authority for appropriate packaging and shipping guidance.**

Microsynth cannot provide packaging or shipping instructions for BSL-2 materials. All BSL-2 shipments must be **handed over directly to an authorized courier or recipient** — never sent via normal post or drop boxes.

### A. Genomic DNA (Ambient Temperature)

- Dissolve your genomic DNA preferably in 10 mM Tris-HCl (pH 8) with 1–2 mM EDTA.

**B. Cells (Ambient Temperature)**

1. Ensure that they are in the exponential growth phase.
2. Harvest either 10 mL of culture,  $\sim 10^8$  cells, or up to 50 mg of wet pellet.
3. Centrifuge the cells and wash the pellet twice with an appropriate buffer (e.g., PBS or TE).
4. Resuspend the cell pellet in 1 ml of NAP buffer.
5. Transfer the resuspended cells to a 2 ml snap-cap or screw-cap tube.

**C. Cells (Frozen)**

1. Ensure that they are in the exponential growth phase.
2. Harvest either 10 mL of culture,  $\sim 10^8$  cells, or up to 50 mg of wet pellet.
3. Centrifuge the cells, wash the pellet twice with an appropriate buffer (e.g., PBS or TE) and transfer it to 2 ml snap-cap or screw-cap tube.
4. Send the pelleted cells only.

**Shipment Instructions**

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**A. For Ambient Temperature Samples (Genomic DNA and Cells)**

- Place the sample in a transparent plastic bag (one bag per order).
- If available, deposit the sample into the nearest Microsynth sample drop box.
- If no drop box is available, ship your samples in a padded envelope to:

Microsynth AG  
Department 3.2  
Schützenstrasse 15  
9436 Balgach  
Switzerland

**B. For Frozen Samples (Cells)**

- Package your samples with dry ice in an insulating, gas-permeable container (e.g., Styrofoam with 2–3 cm walls).
- Dry Ice Requirements:
  - Estimate dry ice evaporation at 100 g per hour for a box size of 33×33×33 cm.
  - For 24-hour shipments, use at least 2.4 kg of dry ice (plus extra for safety).
- Ship early in the week to avoid weekend delays to:

Microsynth AG  
Isolation Department  
Schützenstrasse 15  
9436 Balgach  
Switzerland

## Order Form Completion for Tubes

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Prior to shipping your samples to Microsynth, please proceed as follows to complete your order form:

1. Enter our webshop on [www.microsynth.com](http://www.microsynth.com) (click on "SHOP")
2. Click on „**ONT Sequencing**“ in the green Analysis Services area
3. Click on "**Tube**" or "**Tube incl. Isolation**" under **YeastSeq**.
4. Fill in the order form (use nanopore Seq ID labels) and submit your order

**Note:** If your samples are classified as BSL-2, ensure the biosafety level is declared correctly during order entry and that compliant shipment methods are used. See the "Important Biosafety Notice – BSL-2 Samples" section above.

## Need More Information?

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Approach your territory sales manager (see entry page of your webshop account) or contact us at:

**Microsynth AG**

Schützenstrasse 15

9436 Balgach

Switzerland

Phone: +41 71 726 10 04

Email: [sanger.support@microsynth.ch](mailto:sanger.support@microsynth.ch)