

# Labeling samples for cold storage.

BEST PRACTICES AND MATERIALS

## Best practices for optimized cold storage label performance

Cryogenic and freezer storage for high-value lab samples can pose a challenge. Samples that need to be stored in extreme cold need to be properly and carefully labeled to ensure the sample remains identifiable, but getting labels to stick in those conditions can be challenging.

Cold storage labels may need to endure liquid nitrogen, temperatures as low as -196 degrees Celsius and lab chemicals. These extremely harsh environments require a combination of bespoke materials and correct application procedures for optimized performance.

## Do not apply labels to a frosted surface

Cryogenic labels are meant to withstand extreme cold and frost, but that does not mean they can be applied to any surface. Labels may adhere initially, but issues may arise later in your processes if the surface is not properly prepared. When a label is applied to a frosted surface it is not adhered to the container, but rather to the frost. When this layer melts, the adhesive will lose grip potentially causing the label to fall off. To prevent this, **completely wipe the frost/moisture away from the sample container with an absorbent cloth or paper towel and immediately apply the label.** To aid in creating a moisture-free surface, some labs dip sample containers into isopropyl alcohol after removing the majority of frost, then wipe them dry prior to applying labels. Yet another method is to use compressed air to remove any residual moisture. Using a label that wraps around the vial more than 360° and sticks back onto itself is also recommended where possible.

## Ensure label materials are specifically designed for cold storage

Selecting label materials that are designed for a specific cold storage condition is essential for reliable sample identification. Are you applying to glass or plastic? Are you applying the label at room temperature, or to an already frozen vial? What temperature will the vial be stored at? Does the vial have a small diameter where label “winging” could be an issue? It is important to choose the right label for the given application, ask your Computype representative or refer to the Computype Cryogenic Labeling Datasheet for guidance on specific recommendations.

For additional information, visit <https://www.computype.com/blog/how-to-choose-and-use-cryo-labels-for-storing-biological-samples/>



### FORMIDABLE LAB ENVIRONMENT, MEET FORMING A PARTNERSHIP THAT MAKES THE GRADE.

From printers to scanners to label replication systems, Computype can equip and provide solutions for you no matter the challenges of your lab environment. Over the past twenty years, we've put our labels and adhesives through endless tests to prove they can keep up with lab demands of your laboratory.

### WE'D LOVE TO HEAR FROM YOU.

Computype  
2285 West County Road C  
St. Paul, MN 55113-2567

Twitter: @computype  
Email: [sales@computype.com](mailto:sales@computype.com)  
Fax: 651-633-5580  
Phone: 800-328-0852 | 651-633-0633  
[computype.com](http://computype.com)