

February 2009 – Revision 4

## Shipping Conditions & Recommended Long-Term Storage

Based on Sigma-Aldrich's continual quality improvement processes we have revised some of our corporate procedures and guidelines in order to provide worldwide consistency across all brands. This type of management over all Sigma-Aldrich brands enhances our global quality offer, and improves the services we provide to our customers.

### **Shipping Conditions**

Where there may be short-term exposure (i.e. during shipment) to conditions other than those recommended for long-term storage that will not affect product quality, Sigma-Aldrich will ship at ambient temperature. The products sensitive to short-term exposure to conditions other than their recommended long-term storage are shipped on wet- or dry-ice. Ambient temperature shipping helps to control shipping costs for our customers. Also shipping routes are configured for minimum transit times. At any time, our customers can request wet- or dry-ice shipment, but the special handling is at customer expense if our product history indicates that the product is stable for regular shipment.

### **Recommended Long-Term Storage**

The storage conditions that a Sigma-Aldrich publication and label recommend for products are deliberately conservative. For many products, long-term storage at low temperatures will increase the time during which they are expected to remain in specification, and therefore are labeled accordingly regarding recommended long-term storage.

#### **Ambient Storage**

Many Sigma-Aldrich products may be stored under ambient or uncontrolled conditions. Historically products that are suitable for ambient storage may have labeling that indicates room temperature (RT). This label claim is being phased out and all products that either have no recommendation regarding storage or RT may be stored under ambient, that is uncontrolled, temperature conditions. Please note best practice; avoid direct sunlight during long-term storage due to the temperature elevation this causes.

#### **Controlled Storage**

##### **Controlled Refrigerator/Cooler**

For Sigma-Aldrich products where long-term storage is advised as refrigerator/cooler, our labels indicate 2 to 8 °C. This matches the recommended range indicated in the USP as refrigerator (36 deg F to 46 deg F).

##### **Controlled Freezer**

For Sigma-Aldrich products where long-term storage is advised as freezer, our labels indicate -20 °C. Typically freezer facilities that are used to store these products are thermostatically temperature controlled to within -10 to -25 °C. This matches the recommended range indicated in the USP as freezer.

##### **Controlled Ultracold Freezer**

For Sigma-Aldrich products where the long-term storage is advised as ultracold, our labels indicate -70 °C. Typically ultracold facilities that are used to store these products are thermostatically temperature controlled to within -60 to -100 °C.

### **Summary**

Recommended long-term storage as indicated in Sigma-Aldrich publications and product labels are as follows:

- 2 to 8 °C Refrigerator/cooler
- -20 °C Freezer implies -10 to -25 °C
- -70 °C Ultracold freezer implies -60 to -100 °C

If you have additional questions regarding the Sigma-Aldrich Shipping Conditions & Recommended Long-Term Storage Information statement please contact your local Sigma-Aldrich Technical Service Department: [www.sigma-aldrich.com/techservice](http://www.sigma-aldrich.com/techservice)