

## **GUIDELINES FOR STORING AND SHIPPING ADHESIVES**

### **Product Identification and Shelf Life**

All Lighthouse branded adhesives are marked with a white label on their containers—whether pails or one-gallon cases—indicating the lot number and production date. This date marks the beginning of the product's shelf life, which for most water-based adhesives is **two years from the production date**, provided the container remains unopened.

The two-year shelf life includes time in transit. It's important to factor shipping duration into product use planning.

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### **Proper Storage Conditions**

To maintain the adhesive's quality and performance, follow these storage practices:

- **Keep adhesives indoors**, stacked on wooden pallets and shrink-wrapped (maximum 48 units per pallet, stacked only two pallets high).
- **Store in a temperature-controlled area** between **40°F (4°C)** and **100°F (38°C)**. The optimal range is **65°F to 95°F (18°C to 35°C)**. **KEEP PRODUCT FROM FREEZING**
- **Avoid exposure** to direct sunlight, excess humidity, or unregulated environments like garages, sheds, or loading docks.
- **Do not allow containers to become wet** or remain in locations without temperature monitoring.

Proper storage ensures the adhesive maintains its consistency, spreadability, and bond performance, and preserves label readability.

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### **Handling Temperature Extremes**

#### **Cold Exposure and Freezing**

Water-based adhesives are susceptible to freezing, although most are formulated with emulsion-stabilizing polymers that offer some freeze-thaw resistance. However:



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- **Do not add antifreeze agents** like alcohol or glycol, as these violate VOC restrictions under CRI™ Green Label Plus, SCAQMD Rule 1168, and other indoor air quality standards.
- If frozen, allow the adhesive to **thaw slowly at room temperature—do not stir or mix** during this process.
- Once thawed, **inspect the adhesive** for changes in appearance or texture. If it looks normal, conduct a **quick bond test** to ensure it still performs correctly.

**Repeated freeze-thaw cycles** can damage the adhesive, and some products may become unusable after a single freeze.

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### Cold Weather Shipping Precautions

When adhesives are shipped during colder months, Lighthouse Adhesives uses special protective packaging that includes:

- A foil bubble wrap covering the pallet
- A freeze indicator tab to monitor cold exposure
- Climate controlled refer

If you're receiving a shipment, inspect the freeze indicator before signing. If it shows no exposure, it's safe to accept the delivery. If the indicator shows that the product has frozen, refuse the shipment, and it will be returned to Lighthouse Adhesives automatically.

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### Effects of High Temperature Storage

Excess heat can be just as damaging as freezing. Adhesives stored above the recommended range may:

- **Separate into phases**
- **Lose viscosity**
- **Spoil or degrade more rapidly**



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These changes can compromise installation performance and reduce shelf life.

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### **Important References**

- **ASTM D7149-11:** Standard Practice for Determining the Freeze-Thaw Stability of Adhesives
  - **ASTM D1337-10:** Standard Practice for Determining Storage Life of Adhesives by Viscosity and Bond Strength
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### **⚠ Note:**

This document is for general reference only. While the information provided is based on the industry's best practices, Lighthouse Adhesives does not accept responsibility for any errors or liabilities resulting from the use or interpretation of this guidance.

