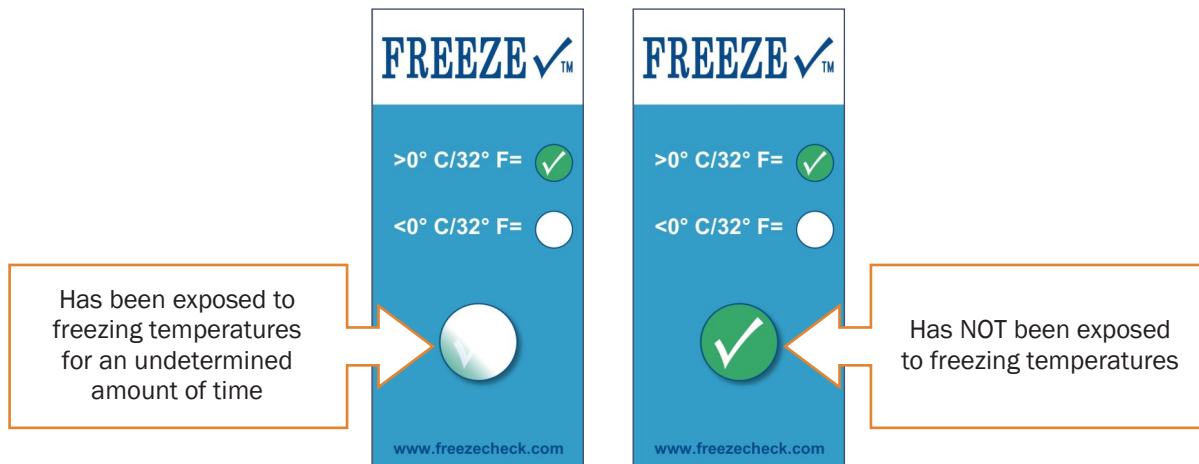


# MANAGING SHIPMENTS OF FREEZABLE MATERIALS

Certain products, such as colloidal silica based binders, can be irreparably damaged by freezing and CANNOT be used once thawed. During winter months, these freezable materials should be shipped as early as possible in the week to ensure that they are continuously moving to their destination. While this does not guarantee product will not freeze, it reduces the risk associated with shipping over a weekend where product may sit at a freight facility unprotected from freezing temperatures.

To help you ensure that the product you receive has not been damaged, R&R applies a freeze check indicator, which features a check mark in a green circle. Temperature-sensitive liquid is encased in a clear bubble over the check mark. The fluid will turn opaque and the check mark is no longer visible once it has been exposed to subfreezing temperatures.

**Note:** This does NOT mean that the material in the package has been frozen; it only means the package has been exposed to freezing temperature.



## If this occurs, immediately:

1. Make a notation on your carrier delivery receipt prior to the carrier leaving your facility:  
**"POSSIBLE CONCEALED DAMAGE – PRODUCT HAS BEEN EXPOSED TO FREEZING TEMPERATURES"**

Always accept a damaged shipment unless the damage has made the goods worthless. In cases of partial damage or loss, accept the entire shipment, document the loss/damage on the carrier receipt and follow the instructions listed on page 2.

2. If able, test the specific gravity of the material as soon as possible. Material may be used if it falls within the limits noted on pages 3-4 of this document. If you are unable to test specific gravity, contact your region's R&R customer service to have a freeze test kit sent to you. Instructions are available in "[Tech Tip: Binder Freeze Kit Instructions.](#)"

### Ransom & Randolph Customer Service Team

Regions: North America, South America, Africa, and Asia

Phone: 800.800.7496 (US Toll Free) or 419-865-9497

Email: [CustomerService@ransom-randolph.com](mailto:CustomerService@ransom-randolph.com)

Hours of Operation: Monday-Friday, 8:00am-4:30pm EST

### Ransom & Randolph GmbH Customer Service Team

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# MANAGING SHIPMENTS OF FREEZABLE MATERIALS

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## How to Handle Lost or Damaged Shipments

Always check your freight for shortages or signs of damage every time you receive a shipment. If you should discover a problem, bring it to the driver's attention immediately. Then take the following necessary steps:

### Visible Damage

If the containers in your shipment show visible signs of damage, open them immediately to check the contents, and ask the driver to inspect the contents with you. Then write a precise description of the damage on both your copy and the carrier's copy of the delivery receipt.

### Concealed Loss or Damage

As soon as possible after delivery, unpack and inspect your shipment. Should you discover a concealed loss or damage, report it to the carrier immediately and request an inspection within 15 days of the delivery date. While you wait for the inspection, make every attempt to leave the containers and packing materials as they were when you first discovered the loss or damage.

### Shipment Shortage

If you feel part of your shipment is missing, count the pieces and check the number against what is indicated on your delivery receipt. Then write a precise description of the shortage on both your copy and the carrier's copy.

### How to Have a Shortage Traced

On both copies of the freight bill, be sure to note shortages. This acts as a written alarm for service center personnel who will make every effort to locate your missing freight. If it becomes necessary to have your shipment shortage traced, contact the person in charge of Over, Short & Damage (OS&D) at your carrier's local service center. Before you make contact, be sure to have the carrier pro number.

### Requesting Inspections

After delivery, contact your local carrier's service center to help you determine if an inspection and formal written report will be required. Keep a written description should a claim need to be filed later. Please note that an inspection report is not a claim.

### How to File a Claim

A claim and its supporting documentation are required to be filed as soon as possible. The carrier will not pay a claim unless it is filed, in writing, within carrier's allotted time period.

Claims and supporting documentation, including product and freight costs, are required. Remember, concealed damage must be reported within 15 days. Documentation relating to your claims is as follows:

- A standard claim form or letter identifying the shipment and the claim amount.
- An invoice for the merchandise that included the full price paid.
- Your paid freight bill. Without payment of charges, payment of transportation has not been made. A valid claim will not be paid until freight charges have been paid. These charges may be recovered on your claim.
- Your bill of lading.
- Inspection report of description of damage.

When the carrier receives your claim, a claim number will be assigned. You should also receive an acknowledgement in writing within 30 days after carrier's receipt of the claim. Examine this acknowledgement carefully, as it may require other documents or information that may be needed to settle the claim.

These guidelines are a summary of uniform commercial practices and are intended to help you avoid or reduce potential problems.



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# MANAGING SHIPMENTS OF FREEZABLE MATERIALS

## Specific Gravity Acceptable Limits of Freezable Materials

### Ceramic Shell Materials

Product	Your Test Results	Lower Acceptable Limit	Upper Acceptable Limit
<b>Primary Binders</b>			
Levasil® colloidal silica		1.206	1.223
Keycote® binder		1.197	1.214
Keycote® concentrate		1.022	1.028
Primcote® binder		1.177	1.183
Primcote® PLUS binder		1.177	1.183
<b>Backup Binders</b>			
Customcote® binder		1.145	1.155
Deluxcote® concentrate		1.023	1.030
EHT binder*		1.322	1.328
Fascote® binder		1.146	1.152
Matrixsol® 30 colloidal silica		1.206	1.223
Matrixsol® LP colloidal silica		1.206	1.223
Matrixcote® concentrate		0.990	1.00
Matrixcote® Pro (all)		1.030	1.037
MXC Boost (all)		1.030	1.037
MXC Excel (all)		1.030	1.037
<b>Slurries</b>			
SuspendaSlurry™ materials		1.200	1.230
<b>Core Materials</b>			
Core-Hardener 2000™ binder*		1.390	1.410
Kwik-Core™ binder		1.108	1.112



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# MANAGING SHIPMENTS OF FREEZABLE MATERIALS

## Specific Gravity Acceptable Limits of Freezable Materials

### Jewelry Materials

Product	Your Test Results	Lower Acceptable Limit	Upper Acceptable Limit
<b>Investments</b>			
Plasticast® PT binder		1.385	1.407

### Dental Materials

Product	Your Test Results	Lower Acceptable Limit	Upper Acceptable Limit
<b>Investments</b>			
Universal Expansion liquid		1.150	1.190



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