



## **RE: Recovery of Carlisle Spray Foam products from freezing temperatures**

To Whom It May Concern,

Every effort should be made to follow the storage parameters detailed in the Technical Data Sheets and Application Guidelines of Carlisle products. If temperatures fall below 32°F for an extended period, freezing of the product can occur. Carlisle SPF products are made up of multiple chemical materials that react differently to freezing conditions. Below are some recommendations to recover these products from freezing conditions.

Material that has been exposed to temperatures below freezing for a period less than 72 hours may attempt to be recovered. Material exposed to freezing temperatures for longer than 72 hours should be disposed of by a licensed disposal facility.

As always it is the installer's responsibility to make sure that the product is performing within specifications.

### **Carlisle Isocyanate**

If freezing occurs, crystals in the material can form. To recover from freezing temperatures slowly allow the material to come up to 65° in a controlled heated space. Set pre-heaters to 100° and heat the material by recirculating until the chemical in the drum is 90°. Continue to recirculate for 1 hour. This should eliminate the crystals.

The screens in both the equipment and gun should be cleaned or changed after this process.

### **Carlisle Open Cell Foams**

Open Cell Foams are most susceptible to freezing due to the chemical makeup of the product. If freezing occurs the product may separate into multiple components. To recover from freezing temperatures slowly allow the material to come up to 65° in a controlled heated space. Mix the material for 30 mins. While mixing with a 1.5hp 3 blade mixer, set pre-heaters to 100° and heat the material by recirculating until the chemical in the drum is 90°. Once the material has reached 90°, recirculating can be stopped and the material should be mixed for 1 additional hour.

### **Carlisle Closed Cell Foams**

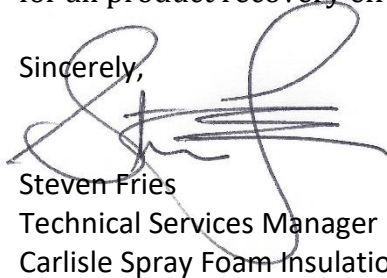
Closed cell foams are difficult to recover from freezing temperatures as they cannot typically be mixed or heated. Recirculating closed cell can damage the product and is NOT recommended. To recover from freezing temperatures slowly allow the material to come

up to 60° in a controlled heated space. The material should then be tumbled or carefully mixed on LOW speed with a 3 blade mixer for 1 hour. Do not allow the material to go over 70° as frothing or loss of blowing agent may occur. Once mixing is done, allow the material to come up to 70° - 80° before application.

If you have followed these steps in the attempt to recover material from freezing temperatures, and the material is not spraying within the recommended specifications, STOP spraying and replace with new material.

Carlisle is not responsible for product performance if storage conditions deviate outside of recommended ranges listed in our product literature and Carlisle cannot guarantee success for all product recovery efforts.

Sincerely,

A handwritten signature in black ink, appearing to read 'Steven Fries', is written over a large, faint circular watermark or stamp.

Steven Fries  
Technical Services Manager  
Carlisle Spray Foam Insulation