

# University of Minnesota Nano Center

## Prebake Dehydration Oven-Standard Operating Procedure

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**Badger Name:** n/a

**Model:** Blue M Stable Therm

**Location:** Keller-Bay 2

**Revision:** 4

**Revisionist:** Laura Parmeter

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### 1. Scope

**1.1.** This document provides detailed instructions on how to properly operate the Prebake Dehydration Oven.

### 2. Tool description

**2.1.** This is a non-exhausted oven with a monitored temperature setting of 150 °C. There is a center rack for placing substrate boats. The dial is set at 150 °C.



*Figure 1 The prebake dehydration oven.*

### 3. Safety

**3.1.** Take caution when unloading your hot substrates when the Prebake time is complete.

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### 4. Restrictions

- 4.1. Wafers must not have any material on the surface that could out-gas fumes. This oven is not exhausted.
- 4.2. Do not change the temperature of this oven; it is to remain at 150 °C.

### 5. Tools and Equipment

- 5.1. 120V electrical outlet.
- 5.2. Quartz boat (optional)

### 6. Procedure

#### 6.1. Setup

- 6.1.1. Place your substrate perpendicular in the quartz boats provided or place them on a handmade foil boat.
- 6.1.2. Users must supply their own method of timing the length of bake.

#### 6.2. Operating Instructions

- 6.2.1. Open the door and place substrates in the oven on the rack and close the door.

### 7. Problems/Troubleshooting

- 7.1. If the settings are not at the above set point, notify MNC staff.