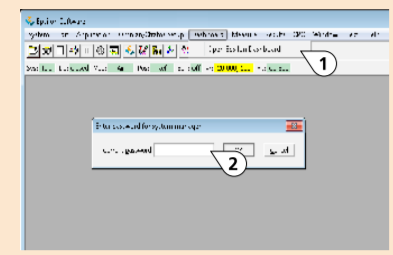


# Creating an Omnian Application and Measuring Unknown Samples

## 1 Importing Omnian Standards

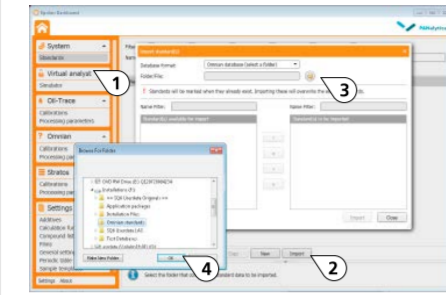
Launch the **Epsilon** software



1. Select **Dashboard > Open Epsilon Dashboard**.
2. Enter the password **Epsilon** and click **OK**.

## Import Standards from DVD

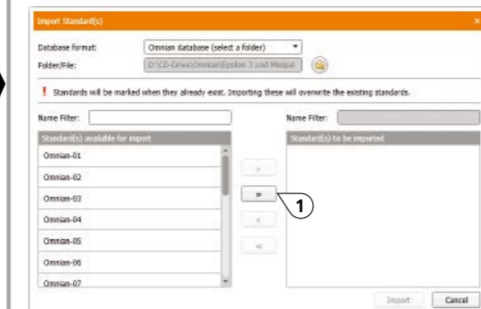
1. Select **Standards**.
2. Click **Import**.



3. Click and browse for the folder with the **Standards Information**.
4. Click **OK**.

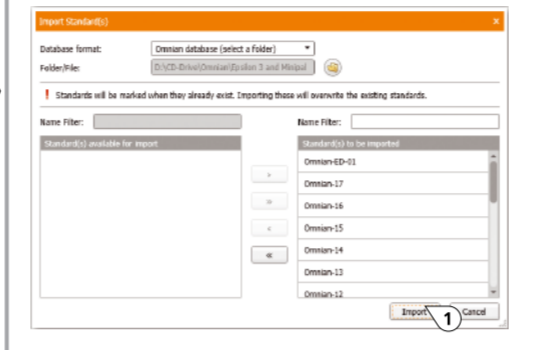
## Copy Standards

1. Click to copy all standards to the right-hand column



## Import Standards into the Omnian Standards Database

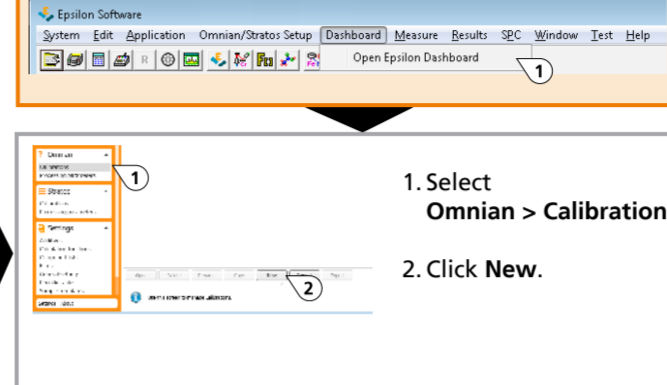
1. Click **Import**. The standards are imported into the Omnian standards database.



## 2 Create New Calibration

Add Standards to the Omnian Calibration.

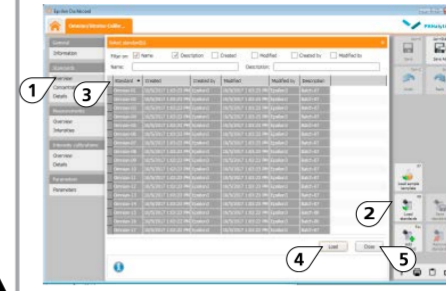
1. Select **Dashboards > Open Epsilon Dashboard**.



1. Select **Omnian > Calibrations**.
2. Click **New**.

## Load Selected Standards into the Calibration

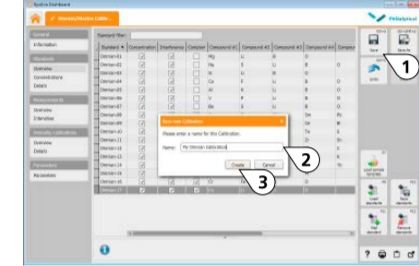
1. Select **Standards > Overview**.



2. Click **Load**. A list of the available system standards opens.
3. Select all Omnian standards in this list.
4. Click **Load**. The selected standards are added to the calibration.
5. Click **Close**.

## Save the Calibration

1. Click **Save**.
2. Enter a name for this calibration. E.g. **My Omnian Calibration**

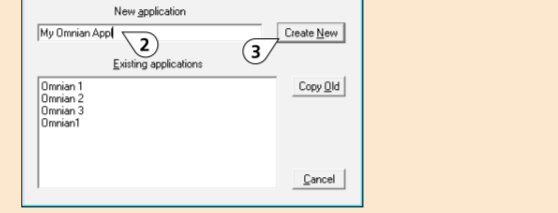
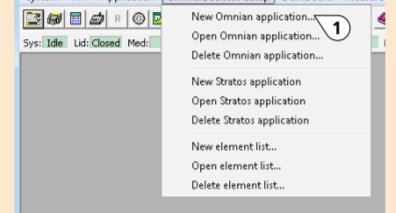


4. Click the **X** to close the Calibration tab.

3. Click **Create**.

## 3 Creating an Omnian Application

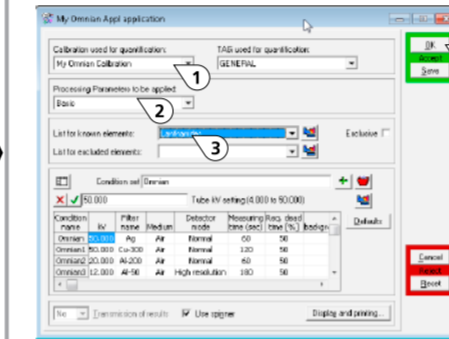
1. Select **Omnian/Stratos Setup > New Omnian application**.



2. Enter a name for the application to generate: **My Omnian Appl.**
3. Click **Create New**.

## Create Omnian Application

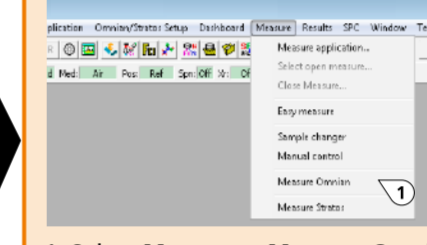
The Application definition window opens.



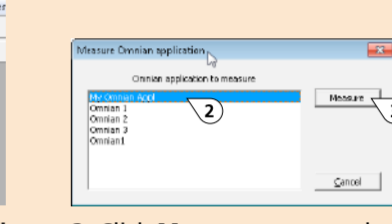
1. Select the Omnian calibration: **My Omnian Calibration**.
2. Select the processing parameter set: **Basic**.
3. Select the correct **List for known elements** and **List for excluded elements**, if available.
4. Click **OK** to save and close the window.

## 4 Measuring Standards

1. Select **Measure > Measure Omnian**.

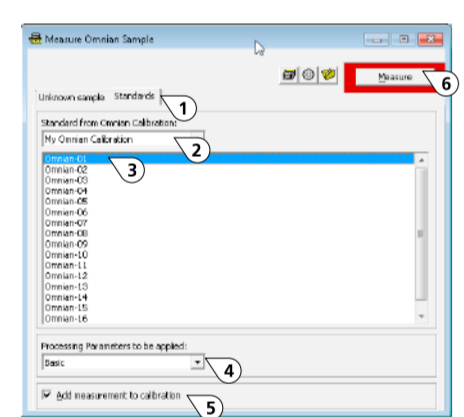


2. Select **My Omnian Appl.**



3. Click **Measure** to open the Measure Omnian Sample window.

## Select Standards for Calibration

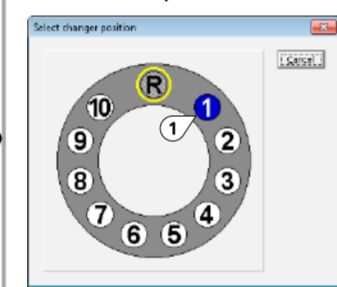


### Measure Omnian Standards Procedure:

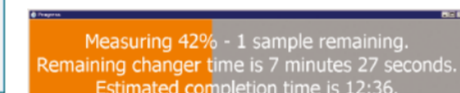
1. Select the **Standards** tab.
  2. Select the calibration: **My Omnian Calibration**. A list of standards that belong to the selected calibration is shown.
  3. Select the **standard** you want to measure. E.g. **Omnian-01**.
  4. Select the processing parameters: **Basic**.
  5. Check **Add measurement to calibration** check box.
- Action:**  
Put the standard in the sample tray on position 1 and close the lid.
6. Click **Measure**. The Select Changer position is shown.

## Select Changer Position and Measure

The Select changer position window is opened.



1. Click the sample changer position 1 where you have put the standard. The measurement starts automatically.
- While measuring:
2. Double-click on the **Progress** window (shown minimized) to view the measurement progress.



Repeat: Measure Omnian Standards Procedure for all Standards.

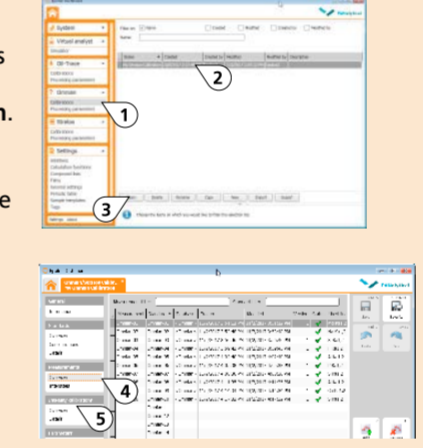
## 5 Calibrating Omnian

Select **Dashboard > Open Epsilon Dashboard**.

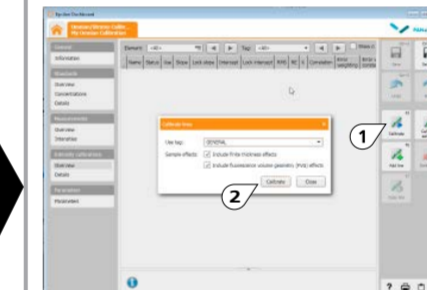
1. Select **Omnian > Calibrations**. A list of Calibrations is shown.
  2. Select the Omnian calibration **My Omnian calibration**.
  3. Click **Open**.
- The Calibration tab **My Omnian Calibration** opens.
4. Select **Measurements > Overview** and check that the measurements for the standards have been added to the calibration.

**Note:**  
If the measurements are not present, add them manually. See the Help File for more info, in the Omnian worked example, about this subject.

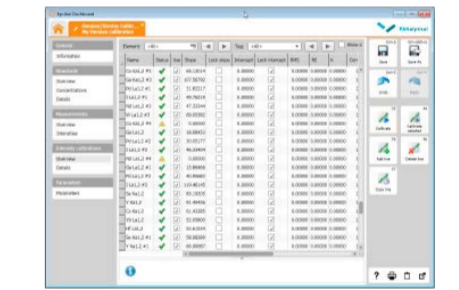
5. Select **Intensity calibrations > Overview**



## Calculate Regression



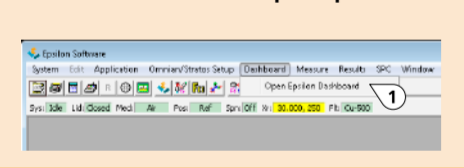
1. Click **Calibrate**. The Calibrated Lines, the Measurement conditions and regression results are shown.
2. Click **Calibrate**.



After the calibration is completed, the **Intensity calibrations > Overview** window shows all the calculated calibration lines.

## 6 Creating Omnian Processing Parameters

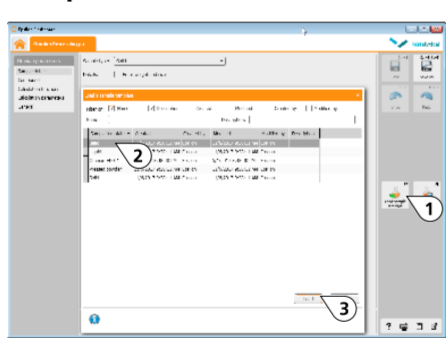
1. Select **Dashboard > Open Epsilon Dashboard**.



## Create new Omnian Processing Parameters

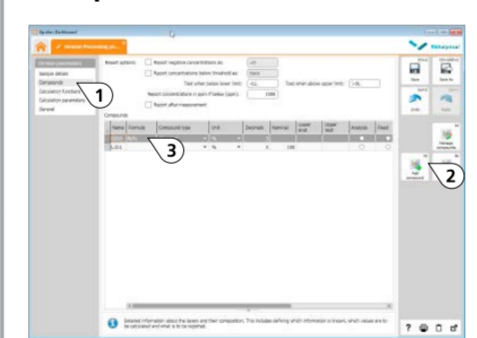
1. Select **Omnian Processing Parameters**.
2. Click **New**.

## Sample Defaults



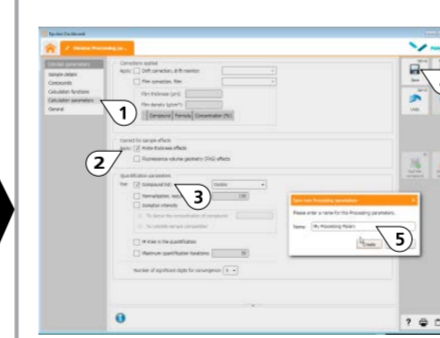
1. Click **Load sample template**
2. Select **Bead**.
3. Click **Load**.

## Compounds



1. Click **Compounds**.
2. Click **Add compound**.
3. Enter **B<sub>2</sub>O<sub>3</sub>** in **Formula** field.

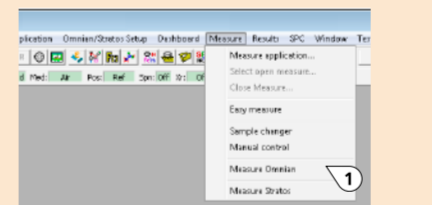
## Select Calculation Parameters



- Optional:
1. Select **Calculation Parameters**.
  2. Select the **Finite thickness effects** checkbox.
  3. Select the **Use compound list** checkbox and select **Oxides**.
  4. Click **Save**.
  5. Enter the file name: **My Processing Param**.

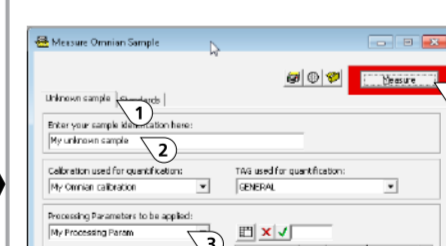
## 7 Measuring Unknown Sample

1. Select **Measure > Measure Omnian**.



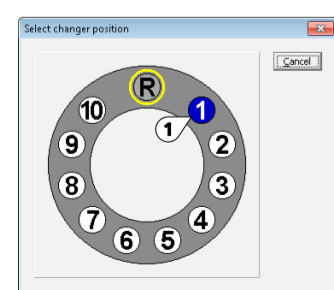
2. Select **My Omnian Appl.**
3. Click **Measure** to open **Measure Omnian Sample** window.

## Enter the Unknown Sample Parameters



1. Select **Unknown sample** tab.
  2. Enter your sample identification here: **My unknown sample**
  3. Select **Processing parameters**.
- Action:**  
Put the sample in position 1 of the sample tray and close the lid.
4. Click **Measure**. The Select changer position window opens.

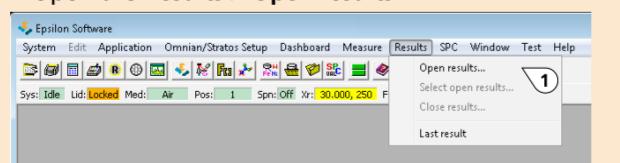
## Start Measuring



1. Click on the sample changer position 1 where you have put the sample. The measurement starts automatically.

## 8 Viewing the Results

1. Open the **Results > Open results**.

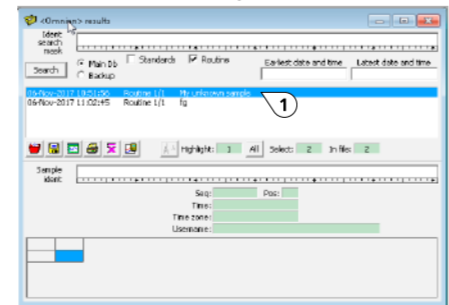


The **Open results** window opens.

2. Select **<Omnian>**
3. Click **OK**. The **<Omnian>** results window opens.

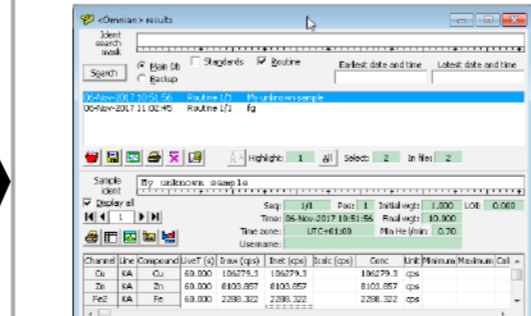
## Select the Results to View

1. Double-click on **My Unknown sample**.



The Omnian results for this measurement will be shown in the lower part of the window.

## View the Results



# Epsilon 4 Quick Start Guide Omnian

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