

# 2023 FROZEN CALIBRATION STANDARDS HANDLING INSTRUCTIONS

In the interest of providing a high quality affordable standard, the standard you are receiving has been flash frozen. Use the instructions below to ensure proper care and use of these flash frozen standards.

## Sample Reception

1. Verify that you have received your entire order intact and please promptly report any problems to DQCI Customer Service - [dqcicustomerservice@us4.eurofins-info.com](mailto:dqcicustomerservice@us4.eurofins-info.com).
  - a. We will replace standards damaged in shipping at no charge, with the exception of large volume samples, special orders, and custom standards.
2. Immediately place the standards in a freezer until use.
3. Each shipment includes a Temperature Control (TC) vial. Please do not discard this TC vial. The TC vial allows you to monitor temperature during the thawing procedure.

## Use of Flash Frozen Standard Samples:

*\*Failure to follow these guidelines will lead to inconsistent results that may not match published values.\**

1. When ready to use the samples, warm all standards in a water bath (preferably circulating) to a temperature of 38-40°C before testing. Do not let samples thaw at room temperature.
2. Warm standards in a water bath for 45min – 1hr 15min.
3. Use the TC sample to determine when the samples have reached adequate temperature for analysis (at least 38°C). Do not allow samples to remain in the water bath more than 30 minutes after reaching an appropriate temperature.
4. After warming the standards, invert them a few times to mix. Invert them gently to avoid incorporating air.
5. Depending on the instrument, the sample volume of each vial is sufficient for multiple draws.
6. Calibrate the instrument as directed by your instrument provider. Verify the calibration by using the duplicate set.
7. Discard standards after analysis. Standards will not maintain quality if retained in freezer or refrigerator after use.