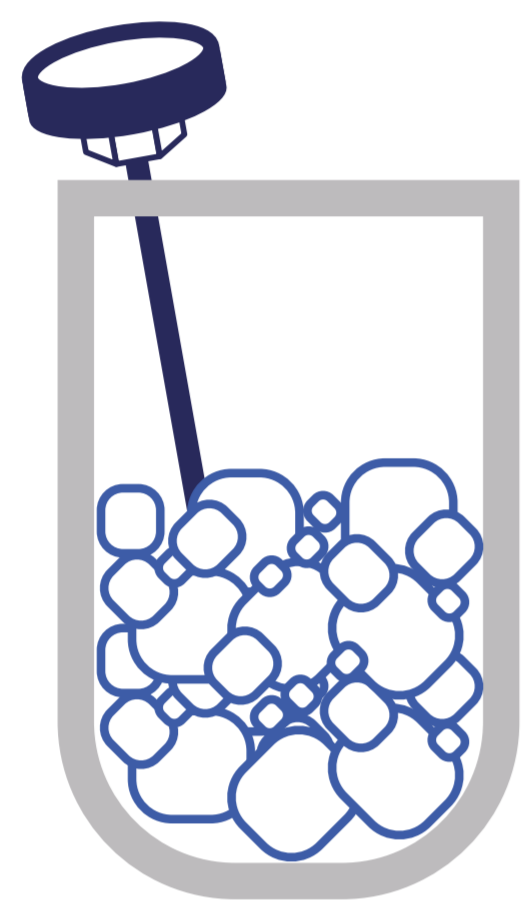


Thermometer Calibration

Freezing point method

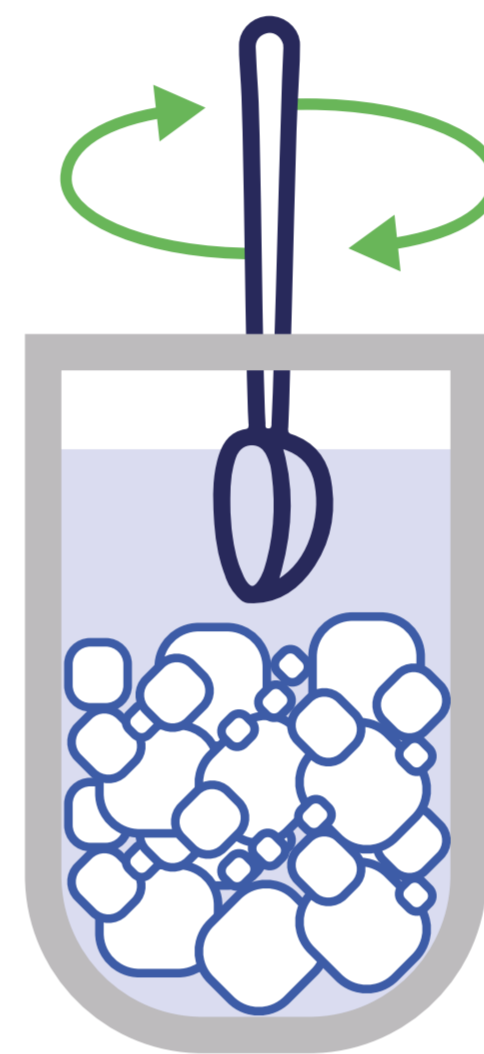
Otherwise known as the ice point method, this technique is commonly **performed for thermometers that are used to measure low temperatures**. Calibration must be performed regularly to ensure accurate temperature readings.

This method is performed as follows:



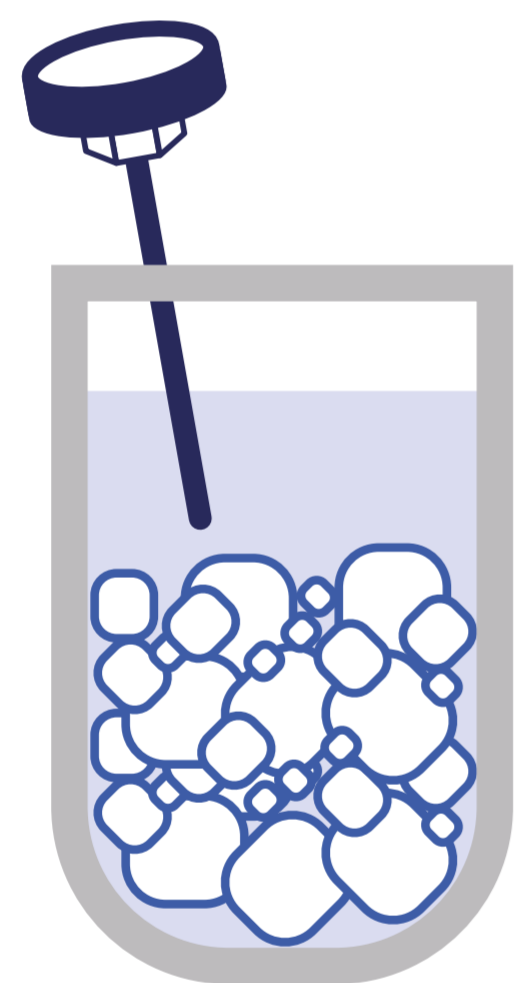
1

Fill a glass that is large enough to accommodate the thermometer probe with crushed ice.



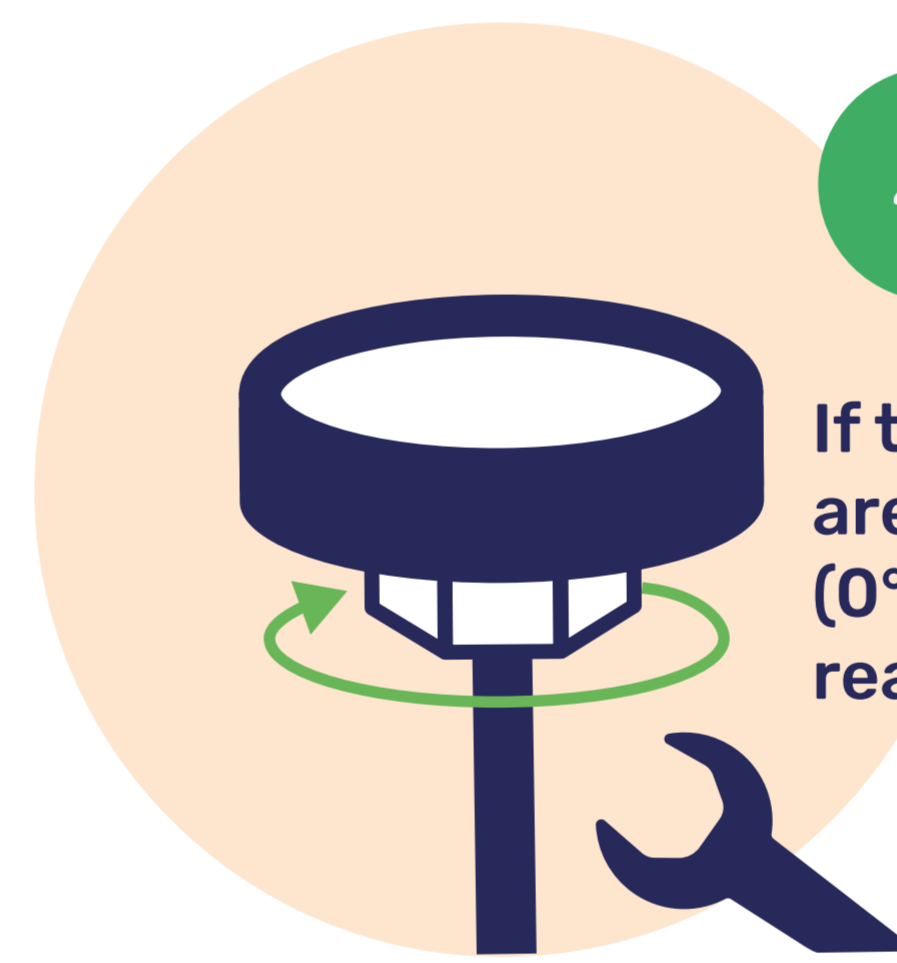
2

Add distilled water or soft water into the glass and stir the ice water mixture.



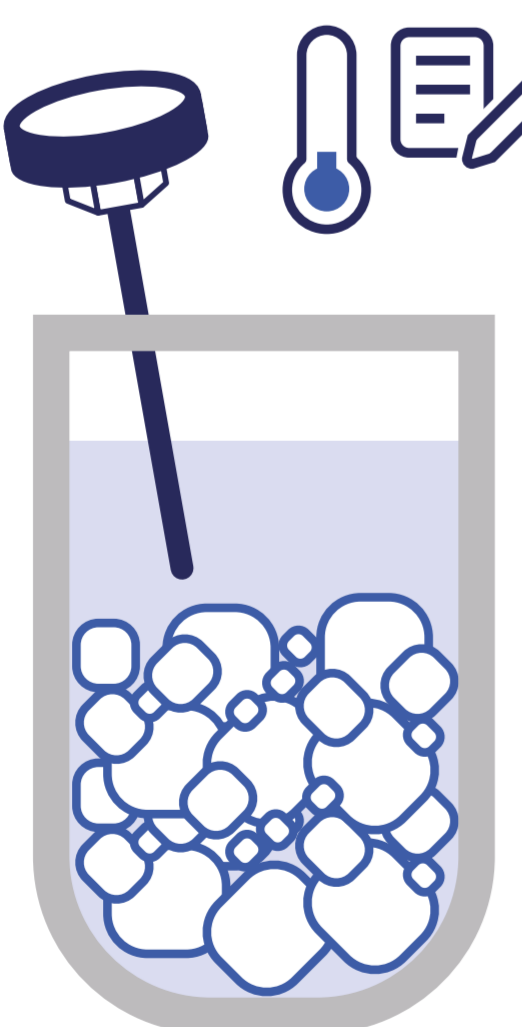
3

Submerge the thermometer probe up until the immersion mark without touching the bottom of the glass. Wait for at least 30 seconds or until the temperature reading becomes stable.



4

If the temperature readings are not the same, ideally 32°F (0°C), adjust the nut until the reading is correct*.



5

Reread the temperature of the ice water solution using the calibrated thermometer at least two to three times and record results on a logbook. Wash the thermometer with room temperature water in between readings.

*For non-adjustable thermometers, an offset value sign can be placed on the thermometer dial as a note. That is, if the temperature reading is 2° higher than the expected reference value, all succeeding readings after calibration must be deducted by 2°.

**If temperature readings are significantly far from the expected value, replace the thermometer.