OXYGEN FLASK CALIBRATION PROCEDURE

CLEANING

Wash each flask and stopper thoroughly in hot soapy water. Rinse with tap water, followed by distilled water. Be sure to rinse the outside as well as the inside of the flask. Once the flask has been cleaned.
DO NOT TOUCH IT WITH YOUR FINGERS.

WEIGHING

a. Pre-weighing procedure

Turn the balance on. Be sure it is stable before proceeding. A balance that can be read to 1 milligram with a range of 300 grams is acceptable for this calibration work.

b. Dry weighing

Using the forceps, put the oxygen flask with its stopper on the pan and weigh. Record the weight as accurately as the balance permits.

c. Wet weighing

1. Slowly fill the flask with distilled water which has been sitting for at least two hours.
2. Replace the stopper.
3. Check for trapped air bubbles in the flask.
4. Pour off the distilled water which has been displaced, and carefully, but rapidly wipe off all excess water from around the stopper.
5. Put the flask with its stopper on the balance pan and weigh. Record the weight as accurately as the balance permits.

d. Temperature

After weighing, remove the flask from the pan. Pull out the stopper and insert a thermometer. (After two minutes) read the temperature to one decimal.

CALCULATIONS

a. Flask volume

1. Subtract the two weights (c minus b from part 2) giving the weight of the water.
2. Using the temperature, determine the correction factor interpolating to the nearest tenth of a degree.