

## 1805, 1806, 1807 Hensen Stempel™ Pipettes

**Introduction:** Obtaining accurate observations on biological samples is essential. To do this, one requirement is a precise measurement of the volume of your sample. This allows you to extrapolate the findings of your study into the environment at large.

Our Hensen Stempel™ Pipettes are useful for retrieving consistent quantities of a uniform, liquid sample. Use them to sub-sample water for identification and quantification of microorganisms, zooplankton and phytoplankton, or any other situation calling for a precise amount of liquid.

**Description:** The Hensen Stempel™ Pipettes consist of an acrylic tube, an aluminum shaft with handle, and two watertight tips (spools). Depending on the model you have, the tips will provide an internal volume of:

- 1mL and 2mL (1806 series)
- 5mL and 10mL (1805 series)
- 25mL and 50mL (1807 series)

Your Hensen Stempel pipette will also have a spring or a spacer, depending on the model number purchased.

**Operation:** To use your Hensen Stempel™ Pipette, first decide which sample size you would like: 1mL or 2mL, 5mL or 10mL, 25mL or 50mL. To protect them, both tips are shipped inside the tube. One of them will be screwed onto the aluminum shaft and the other will be free (attached only by the suction of some vacuum grease). The tips easily screw on and off the plunger, making it a simple matter to change them. When not in use, place the other tip aside. Be careful not to lose it. It is a good idea to store the tips inside the tube (as shipped to you) when finished.

To get a uniform sample, you must first agitate your specimen. Using a stirring implement, stir up your liquid sample until it is as uniform as possible. Next, extend the plunger of the pipette until the tip has completely cleared the tube. Place the tip of the tube just under the surface of the sample, and slowly draw the plunger upwards (or allow the spring to retract the plunger). The two seals on either end of the tip will keep the sub-sample from escaping, as well as holding a precise amount of liquid.

Note: the tips are coated in vacuum grease to aid in making a seal. This is inert and will not affect your sample. Periodically, you may wish to reapply the vacuum grease (or petroleum jelly).



**Warranty and Parts:**

We replace all defective or missing parts free of charge. Additional replacement parts may be ordered toll-free. We accept MasterCard, Visa, checks and School P.O.s. All products warranted to be free from defect for 90 days. Does not apply to accident, misuse or normal wear and tear. Intended for children 13 years of age and up. This item is not a toy. It may contain small parts that can be choking hazards. Adult supervision is required.

**May we suggest:**

**1801-A10 Sedgewick Rafter Cell:** Holds 1mL volume used for counting zooplankton.

**1801-A20 Gridded Sedgewick Rafter Cell:** Holds 1mL volume and the glass is divided into one millimeter squares. Used for counting zooplankton.

**1803-B20 Palmer Cell:** Similar to Sedgewick Rafter but specifically used for nannoplankton with a shallow circular chamber for 40-45X objectives.

**1831-F10 Folsom Plankton Splitter:** Holds 0.5L volume of a sample in a drum used for splitting samples in two.