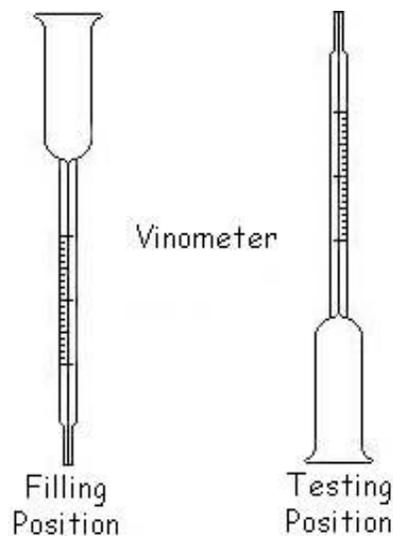


# VINOMETER

- A vinometer is an apparatus that consists of an open, graduated glass tube with a small filling reservoir.
- The vinometer's reservoir or funnel is first filled with a small amount of wine being tested (being careful to avoid air bubbles) until some wine exits out at the other end.

It is then turned over and placed on a flat surface so the filling reservoir side is faced down, and allowed to self drain. When turning the Vinometer over into the testing position you may want to use a dish to catch the excess liquid that will drain from the reservoir.

The alcohol concentration level is read on the vinometer's scale, on the capillary (tube), at the top of the liquid being measured, in % alcohol.



- The level of the liquid is determined by the modifying affect that alcohol has on the interfacial tension between water and glass and the opposing surface tension of water.
- The greater the alcohol concentration, the less marked the liquids capillary action and the lower it will sit in the tube of the vinometer.
- The vinometer is calculated on the basis of pure alcohol and water solutions. Whereas wine is not a pure water/alcohol solution, the accuracy of a vinometer maybe be affected because...
  - Sugar interferes with the interfacial effects that a vinometer's action relies on. Therefore the method can only be applied to dry wines.
  - Similarly other components in wine can also interfere with accurate measurements.
- When measuring white wine, the addition of a red dye allows better visualization of the wine level. However the dye should not contain alcohol or components that would interfere with the measurement.