

EXPLANATION - BRIX MEASUREMENT (REFRACTIVE INDEX)

A **Refractometer** determines degrees **Brix** by measuring the refraction of light passing through a liquid sample. Liquids containing sugars and/or other dissolved solids are denser than water and cause greater refraction as light passes through. The instrument compares this to the refraction of light through water and provides a **Brix** value. Dissolved sugar content was originally estimated by measurement of specific gravity using a hydrometer. Hydrometers are still widely used, but a **Refractometer** is preferred when greater accuracy is required.

The **refractive index** depends not only on the wavelength used to measure, but also on the temperature of the solution being measured. There is a direct relationship between the **refractive index** and **BRIX**. The measured **refractive index** is converted directly into weight percent solids content (**°Brix**). The **Brix** scale is a popular scale derived from the refractive index of a solution at 20 degrees Celsius (68 Fahrenheit). **Brix** is a measure of the amount of sugars and/or dissolved solids in a liquid via its specific gravity. The **Brix** of a cold sample will measure higher than the same sample at room-temperature. When measured hot, the **Brix** reading will be lower.

BRIX Concentration Chart
AG-FH

