

PRODUCT INFORMATION



SPI Supplies
206 Garfield Avenue,
West Chester, PA 19380, USA

Cargille™ Refractive Index Liquids

Standard group only

The standard group consists of a total of 220 different liquids divided into six different series extending in the range from 1.300 to 1.800. The Certified Series cover the range of the most minerals, most chemicals, and practically all biological materials.

All refractive index values were taken at the "D" line which is 589.3 nm (5893Å) at 25° C.

Relationship between Cargille Refractive Index values and Brix values:

The Cargille Refractive Index liquids can be used for Brix measurements. However, the values for the Cargille Refractive Index liquids are reported at 25° C. Since Brix measurements are usually done at 20° C, a calculation needs to be done to get to the corresponding Brix value.

Packaging:

Standard packaging of all fluids is the 0.25 fl. oz. (7 ml) bottles with applicator tops. Sets are packed in attractive partitioned boxes for convenient access and orderly storage. Temperature coefficients and dispersion values are included on each index liquid label.

Refractive Index Values at Other Wavelengths:

As indicated above, measurements are routinely made at our standard wavelength of 589.3 nm at 25° C. The Refractive Index values at other wavelengths are calculated using the Cauchy equation which is specific for each liquid. The tolerances of variation in the UV and infrared regions become greater (than in the visible).

Availability of liquids of refractive index less than 1.300:

We do not presently offer liquids with refractive index less than 1.300 since liquids we have formulated that would be in that range have one or more components with relatively high vapor pressures. And since such liquids would have one or more components that were highly volatile, there would be a constant changing of refractive index as a function of time out of the bottle. We do not believe that would be serving our customer's best interests by offering such unstable liquids.

Special information about ordering:

If any of the half-sets is purchased, the other "half set" can also be ordered but by specifying "half alternate" to obtain the complete and complimentary half-set. Because of the high possibility of misunderstanding as to what is really wanted, make absolutely certain that if placing the order via Shopping Cart, at the very end of the order placement process, where there is a change to send additional comments, be sure to call to our attention that it is the "alternative half-set" that is being ordered.

Refractive index values for different materials:

A good place to start would be **The Handbook of Chemistry and Physics** (CRC), It lists the RI values of a number of organic compounds.

Shelf life:

The products are very stable however they are in general organic compounds and therefore, any prediction of shelf life would clearly be less than "infinite". The dating does reference shelf life as opposed to some absolute expiration date. And the shelf life is a function of the particular refractive index product:

Series AAA, AA, A, B, H, EH: 5 years unopened, when stored at room temperature, in a dark environment 2.5 years if opened

Series M: 18 months maximum

Series E: 2.5 to 5 years depending on RI (the higher the longer)

Revised by: EER

Date: 9/27/2015