

3.3. MEASUREMENT OF REFRACTIVE INDEX

which selenium is transparent; the red line of lithium is convenient.

3.3.4. Media for organic substances

Organic substances are usually soluble in organic liquids, but not usually in aqueous solutions. The saturated solutions listed in Table 3.3.4.1 (Jelley, 1934, p. 245) are generally satisfactory. For substances of low solubility, the organic liquids listed in

Table 3.3.4.2 may be useful; the refractive index of diluted aqueous solutions changes with time because of evaporation.

If the index of refraction is greater than about 1.7, the media at the end of Table 3.3.2.1 have to be used. These usually dissolve organic crystals, so that the immersion liquid becomes saturated with the compound. The refractive index of the saturated medium is then measured with a microrefractometer (Jelley, 1934, pp. 236–240).