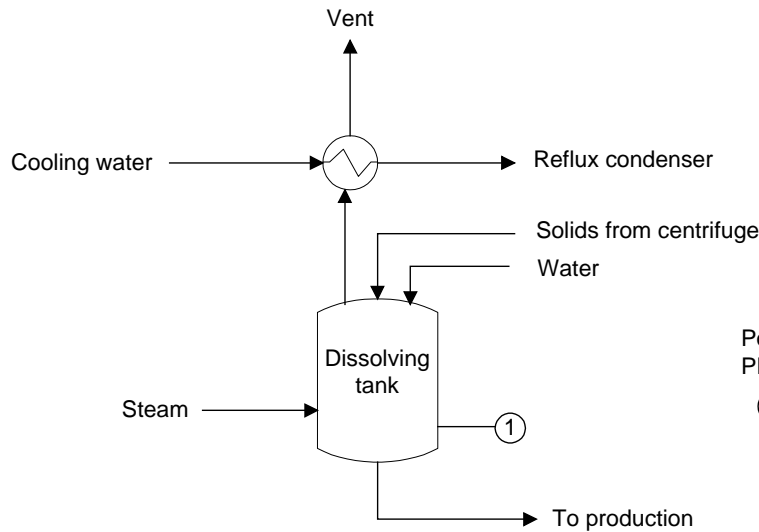


**Ca-Araborate**



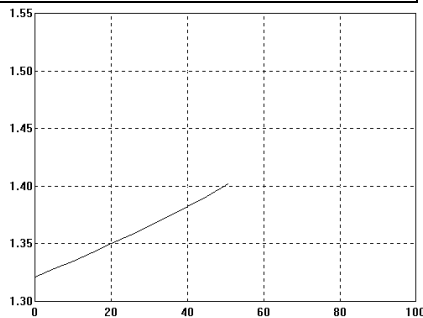
Positions where K-Patents PR-01-S is used:

- ① In dissolving tank

**Ca-Araborate**

Typical end products  
Vitamin-B (Riboflavin)

Chemical curve: R.I. per Conc% b.w.



R.I. Ref. temp. 90°C

**Introduction**

Ca-Araborate is used in the manufacture of Vitamin B2, Riboflavin. Corn is converted into glucose which then is further oxidized and purified by an ion-exchanger into Ca-Araborate. Ca-Araborate is precipitated, separated by centrifugation, dissolved in water and further processed to Vitamin B2.

**Application**

The solid Ca-Araborate is taken from the centrifuge into the tank and dissolved in water to about 50% at 90°C (194°F). It is very important that the concentration of Ca-Araborate entering the following production step is constantly the same.

Previously the desired concentration of Ca-Araborate in water was obtained by weighing out the cal-

culated amount of water and timing the addition of solid Ca-Araborate from the centrifuge. K-Patents Process Refractometer PR-01-S was installed in order to improve the concentration control.

**Installation**

K-Patents PR-01-S is used by the operator to secure that each tank content has the correct Ca-Araborate concentration before it is used further in production.

Typical measurement range is 10-50%b.w. and the normal process temperature about 90°C (194°F). Automatic prism cleaning with an integral steam nozzle is recommended.