DETERMINATION OF **FRUCTOSE, GLUCOSE, AND SACCHAROSE**
IN BEVERAGES, FRUIT AND VEGETABLE PRODUCTS,
HONEY, DIETARY SUPPLEMENTS

**INTRODUCTION**
The method is used for the determination of mass concentration of fructose, glucose, and saccharose (hereinafter – sugars) in all types of non-alcoholic and alcoholic beverages including juices and wines, fruit and vegetable products, honey, and dietary supplements by capillary electrophoresis.

**MEASUREMENT METHOD**
The measurement method is based on extraction of sugars from a solid sample by water (dilution of a liquid sample) and their determination by capillary electrophoresis with indirect UV detection at the wavelength of 254 nm.

**MEASUREMENT RANGE**
The measurement range of the concentration of the components is 2–800 g/L (0.2–80 %).

**EQUIPMENT AND REAGENTS**
The CAPEL capillary electrophoresis system is used in measurements. Data acquisition, collection, processing, and output are performed using a personal computer running under WINDOWS® XP/7/8/10 operating system with installed dedicated software package ELFORUN.

Lumex Instruments kit, order No. 0300001587.

**EXAMPLES OF REAL ANALYSES**

**BGE:** electrolyte based on potassium sorbate with CTAB (pH 12.1)

**Capillary:** Leff/ Ltot = 65/75 cm, ID= 50 µm

**Injection:** 150 mbar x sec

**Voltage:** – 25 kV

**Temperature:** 20 °C

**Detection:** 254 nm

**Sample:** orange juice (dilution 1:100)

**Measurement results:**
1 – fructose (28.5 g/L)
2 – glucose (28 g/L)
3 – saccharose (49 g/L)

---

The contents on this paper are subject to change without notice.
To get more specific information, please contact the representative by sales@lumexinstruments.com