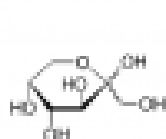
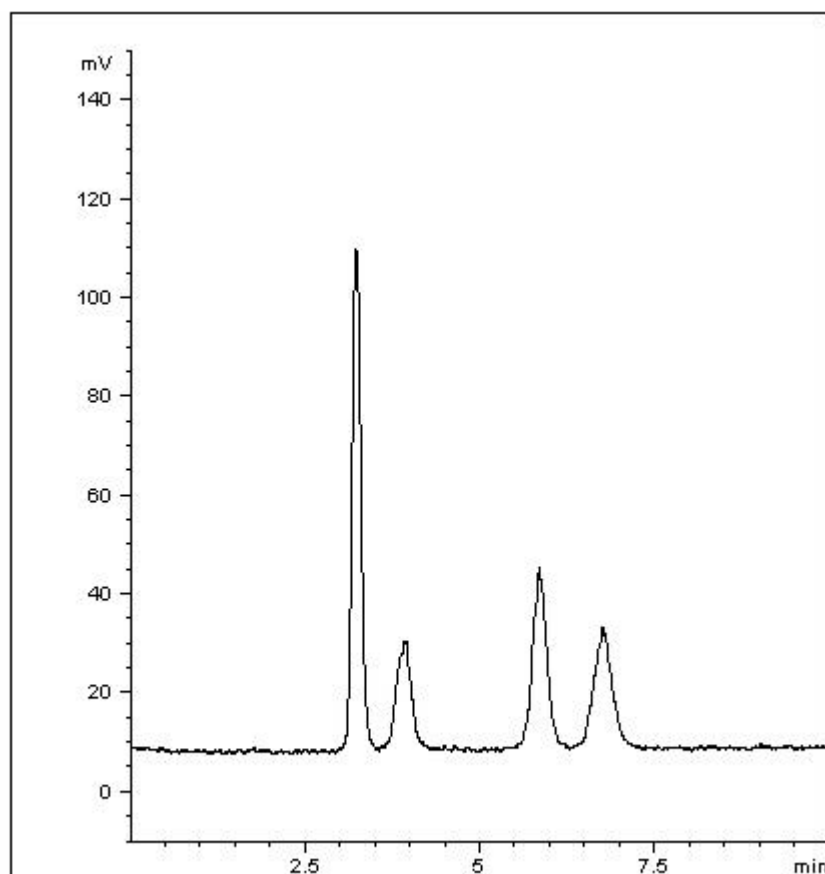


Sugar Mixture Analyzed with ELSD – AppNote

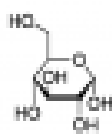
Retention and Separation of Mono and Disaccharides

Click [HERE](#) for Column Ordering Information.

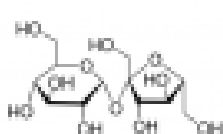
This Method demonstrates the ability to retain two highly polar test solutes. Lactose, for example, has a log P of -4.7 and hence would be unlikely to retain in Reversed Phase. Great separation is observed for these Mono and Disaccharides.



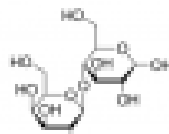
1



2



3



4

Peaks:

1. Fructose

2. D-Galactose

3. Sucrose

4. Lactose

Method Conditions

Column: Cogent Amide™, 4µm, 100Å

Catalog No.: [40036-10P](#)

Dimensions: 4.6 x 100mm

Mobile Phase: 85% Acetonitrile 15% DI Water / 0.1% Triethylamine (TEA) (v/v)

Flow rate: 1.0 mL/minute

Detection: ELSD (Evaporative Light Scattering Detector) Gain: 10; Temperature: 65°C;

Injection vol.: 1µL

Sample Preparation: Reference standards (1 mg/mL) in diluent of 50% Acetonitrile / 50% DI Water (v/v)

t₀: 1.50 Minutes

K₁: 0.39

Note: Galactose is a monosaccharide and Sucrose (common name "table sugar") is a disaccharide. Although a ubiquitous component of sweet foods and beverages today, refined Sucrose was once considered a luxury in many parts of the world.

Capacity Factor - Relative Retention $k = (t_R - t_0)/t_0$



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