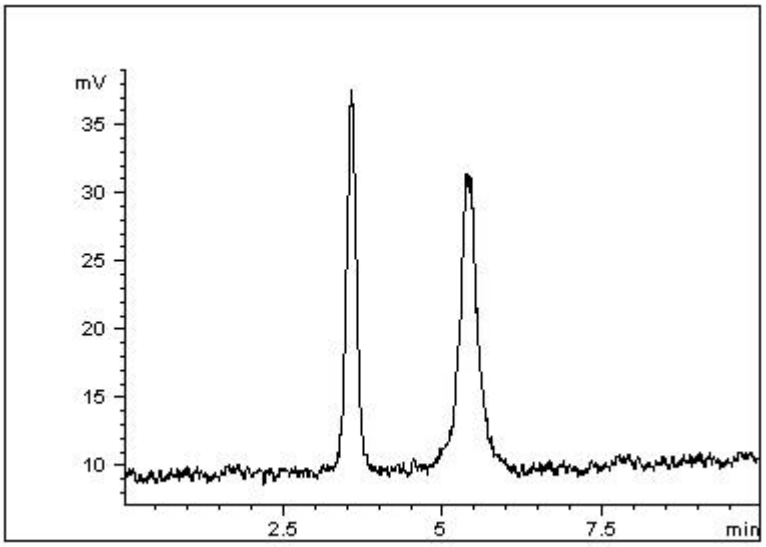
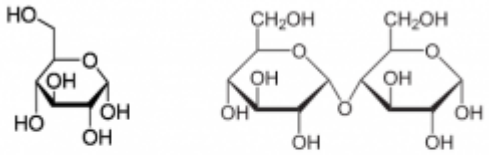
Galactose and Maltose Analyzed with ELSD – AppNote

Retention and Separation of Mono and Disaccharides

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





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Peaks:

1. D-Galactose
2. Maltose

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: 1.33

Note: Galactose is a monosaccharide and Maltose is a disaccharide. Maltose is the disaccharide produced when amylase breaks down starch.

Note: Capacity Factor - Relative Retention k = (tR-t0)/t0

COGENT HPLC Columns™

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