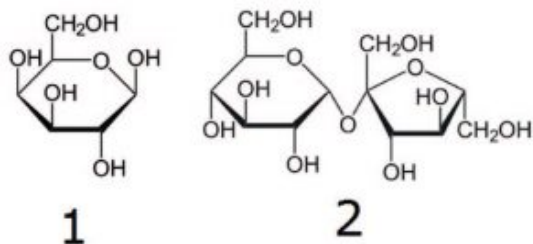
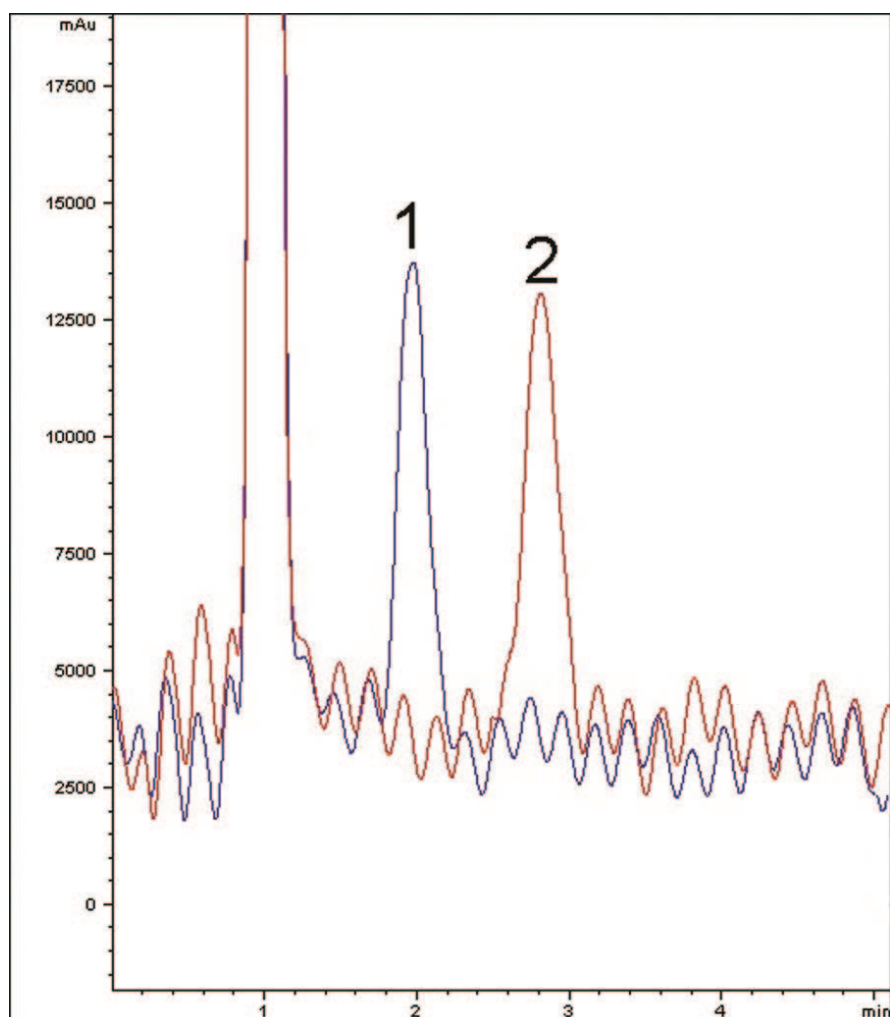


Galactose and Sucrose - AppNote

Retention and Separation of Mono and Disaccharides

This application demonstrates the ability of the Cogent Amide Column to retain two highly polar test solutes. Sucrose, for example, has a log P of -3.7 and hence would be unlikely to retain in Reversed Phase. Excellent separation is obtained here for these Mono and Disaccharides. The noisy baseline is simply due to the inherent limitations of the Refractive Index Detector, used in this case due to the lack of chromophores in these molecules. The large peak at 1 minute is from the solvent front.



Peaks:

1. D-Galactose
2. Sucrose

Method Conditions

Column: Cogent Amide™, 4µm, 100Å

Catalog No.: 40036-05P

Dimensions: 4.6 x 50mm

Mobile Phase:

A: 90% DI Water / 10% Acetonitrile / 0.1% Formic Acid (v/v)

B: Acetonitrile / 0.1% Formic Acid (v/v)

Flow rate: 1.0 mL/minute

Detection: Refractive Index

Injection vol.: 4µL

Sample Preparation: D-Galactose and Sucrose reference standards (1 mg/mL) in diluent of 30% Acetonitrile / 70% DI Water (v/v)

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.



Attachment

No 355 Galactose and Sucrose pdf 0.4 Mb [Download File](#)

Printed from the Chrom Resource Center

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

Date: 07-22-2024