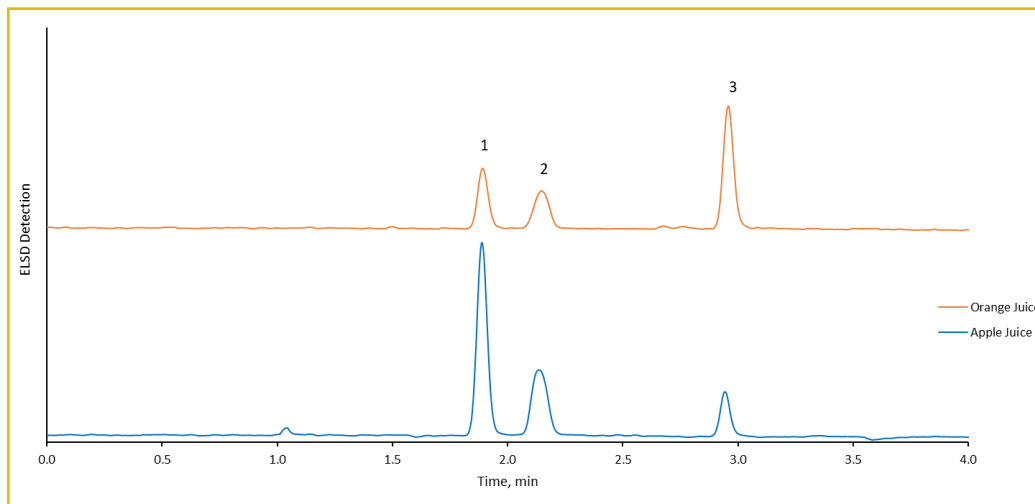




Analysis of Sugars in Juice using HALO® Penta HILIC

227-F



PEAK IDENTITIES

1. Sucrose
2. Glucose
3. Fructose

TEST CONDITIONS:

Column: HALO 90 Å Penta-HILIC, 2.7 μm 4.6 x 150 mm

Part Number: 92814-705

Mobile Phase A: Water
B: Acetonitrile

Isocratic: 80 %B

Flow Rate: 1.4 mL/min

Pressure: 213 bar

Temperature: 65 °C

Detection: ELSD, 40°C, 3.3 bar

Injection Volume: 0.2 μL

Sample Solvent: Water

Data Rate: 10 Hz

Response Time: 0.10 sec

Flow Cell: 1 μL

LC System: Shimadzu Nexera

The main sugars in natural fruit juice are fructose, glucose, and sucrose. Each type of juice will contain different ratios of these sugars. Juices obtained from concentrate can also be found to have various amounts of artificial sweeteners. Analysis of sugars is performed on a HALO® Penta-HILIC column with excellent speed and resolution. A comparison of the different sugars in apple juice and orange juice is observed using an ELSD detector.

