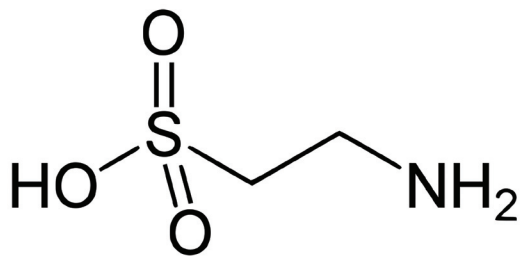
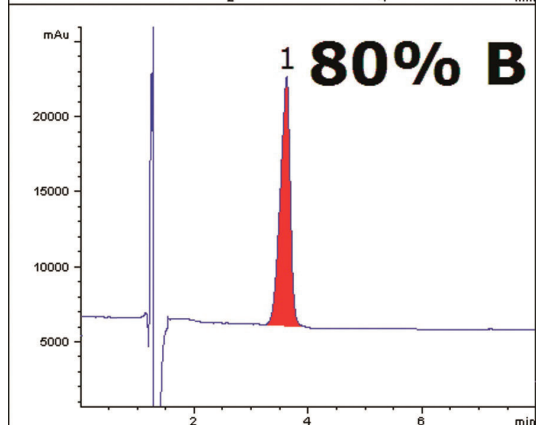
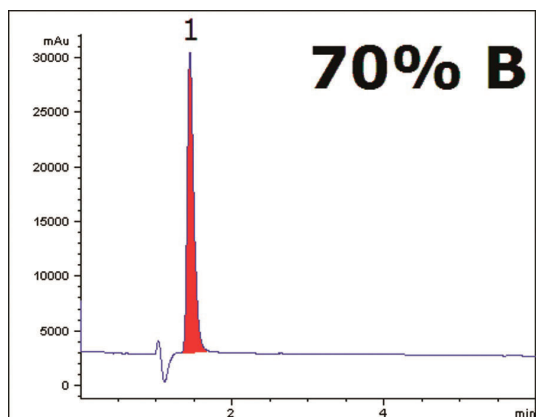


Taurine by HPLC-Refractive Index

Retention of highly polar compound



Note: Taurine is added to many popular energy drinks today. It is found naturally in animal tissues and is a major constituent of bile.

Method Conditions

Column: Cogent Diamond Hydride™, 4µm, 100Å

Catalog No.: 70000-7.5P

Dimensions: 4.6 x 75 mm

Solvents: A: DI water / 0.1% formic acid (v/v)

B: Acetonitrile / 0.1% formic acid (v/v)

Injection vol.: 4 µL

Flow rate: 1.0 mL/min

Detection: Refractive index

Sample: 8 mg/mL taurine reference standard in diluent of 80/20 solvent A / solvent B.

Peak: 1. Taurine

t₀: 0.9 min

Discussion

The food and beverage industry may need reliable methods for assay for taurine in their products. However, its analysis is complicated by the lack of chromophores in its structure. LC-MS can be used instead, but many QC labs may not have this instrumentation or might prefer a more simple detection method for routine assays. Here, simple isocratic methods are shown for retention of a taurine standard. The increased retention at higher organic content in the mobile phase illustrates the chromatographic behavior of the Cogent Diamond Hydride column for retention of polar compounds. As a highly polar compound, taurine can be difficult to retain by conventional reversed phase methods.