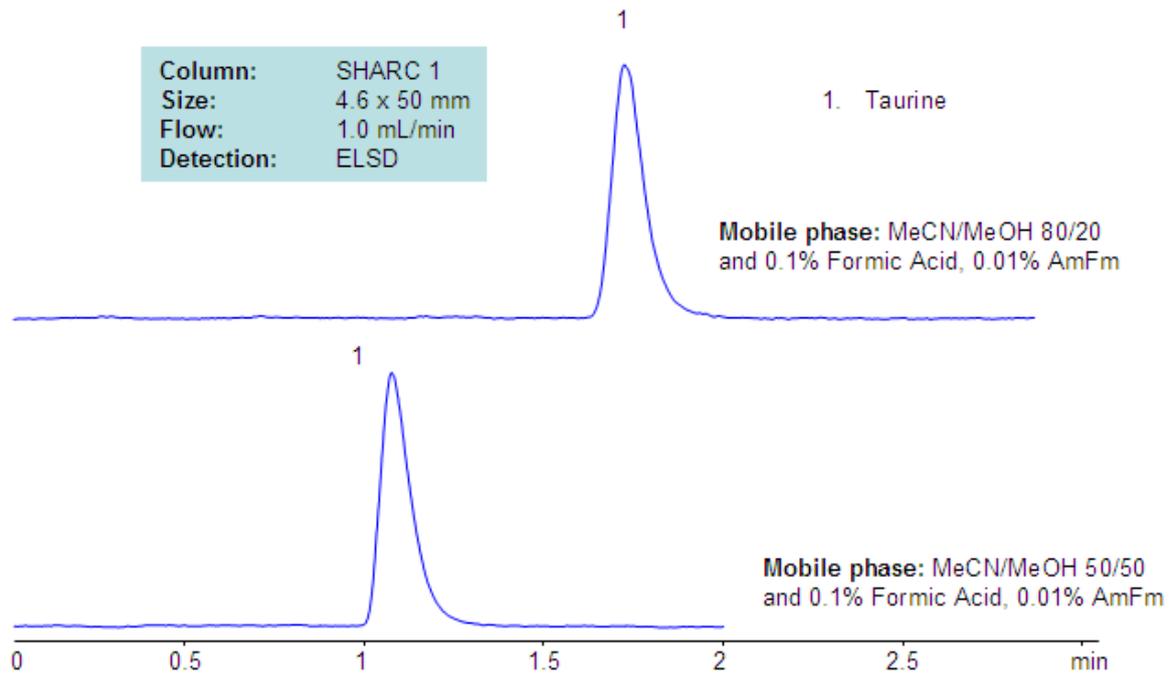


Retention of Taurine on SHARC Column



Taurine, or 2-aminoethanesulfonic acid, is a very polar zwitter-ionic compound. Taurine is used as an additive for various nutrition composition. The polar and zwitter-ionic nature of taurine prevent it from analysis by RP chromatography, in addition to that, taurine is not UV active and cannot be monitored by UV. The analytical method for analysis of taurine was developed on the SHARC1 hydrogen-bonding column. This method with some modifications can be used for the analysis of taurine in complex mixtures with a ELSD or a LC/MS detector.

The SHARC™ family of innovative columns represents the first commercially available columns primarily utilizing separation based on hydrogen bonding. SHARC stands for Specific Hydrogen-bond Adsorption Resolution Column. Hydrogen bonding involves an interaction or attraction between a bound hydrogen atom and molecules containing electronegative atoms, such as oxygen, nitrogen, and fluorine.

Method Parameters

Column	Sharc 1, 4.6x50 mm, 5 µm, 100 Å
Mobile Phase	MeCN/MeOH
Buffer	Formic Acid – 0.1%, AmFm – 0.01%
Flow Rate	1.0 mL/min
Detection	ELSD

Quelle: <https://sielc.com/Application-Retention-of-Taurine-on-SHARC-Column>