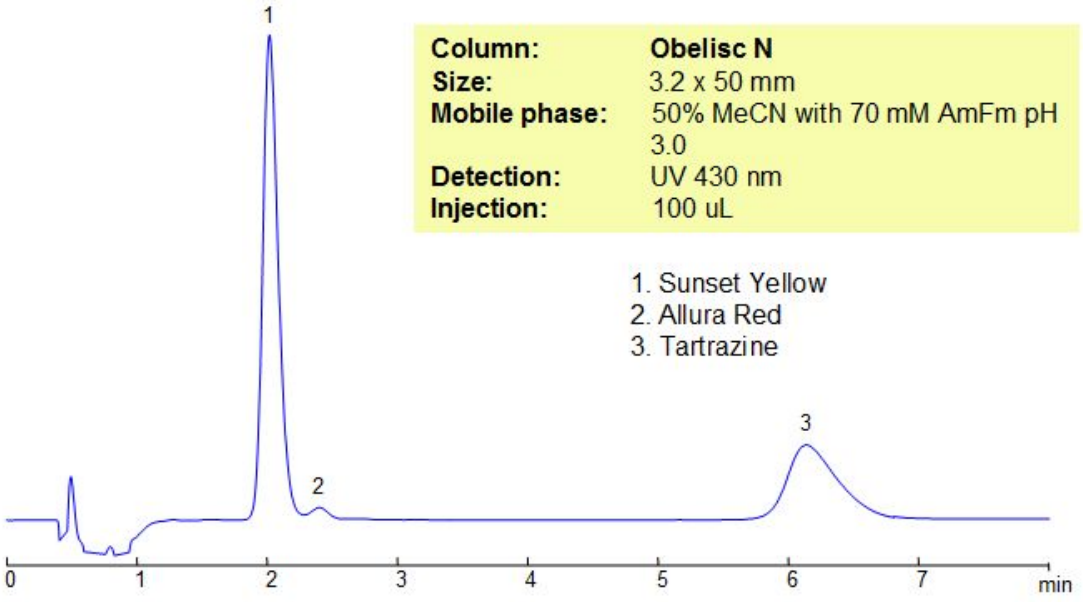
HPLC Method for Analysis of Allura Red, Sunset Yellow, Tartrazine in Mountain Dew Live Wire at 1 Wavelength



Sunset Yellow FCF, also known as Orange Yellow S, C.I. 15985, or Yellow 6, is a petroleum-derived orange azo dye. When in powder form, it is Reddish-orange, but when dissolved in water, the liquid becomes bright yellow.The dye is banned or restricted in Norway, Finland and Sweden. Obelisc N is a column with very polar characteristics. It contains embedded acidic and basic ionizable groups and can retain Sunset Yellow. The method is LC/MS and UV compatible and can be used as a general approach for analyzing similar compounds.

SIELC has developed the Obelisc™ columns, which are mixed-mode and utilize Liquid Separation Cell technology (LiSC™). These cost-effective columns are the first of their kind to be commercially available and can replace multiple HPLC columns, including reversed-phase (RP), AQ-type reversed-phase, polar-embedded group RP columns, normal-phase, cation-exchange, anion-exchange, ion-exclusion, and HILIC (Hydrophilic Interaction Liquid Chromatography) columns. By controlling just three orthogonal method parameters - buffer concentration, buffer pH, and organic modifier concentration - users can adjust the column properties with pinpoint precision to separate complex mixtures.

Method Parameters

Column	Obelisc N, 3.2×50 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O – 50/50%
Buffer	AmFm pH 3.0 – 70 mM
Flow Rate	0.6 mL/min
Detection	UV, 430 nm

Quelle:
https://sielc.com/hplc-method-for-analysis-of-allura-red-and-brilliant-blue-in-mountain-dew-live-wire-at-1-wavelength