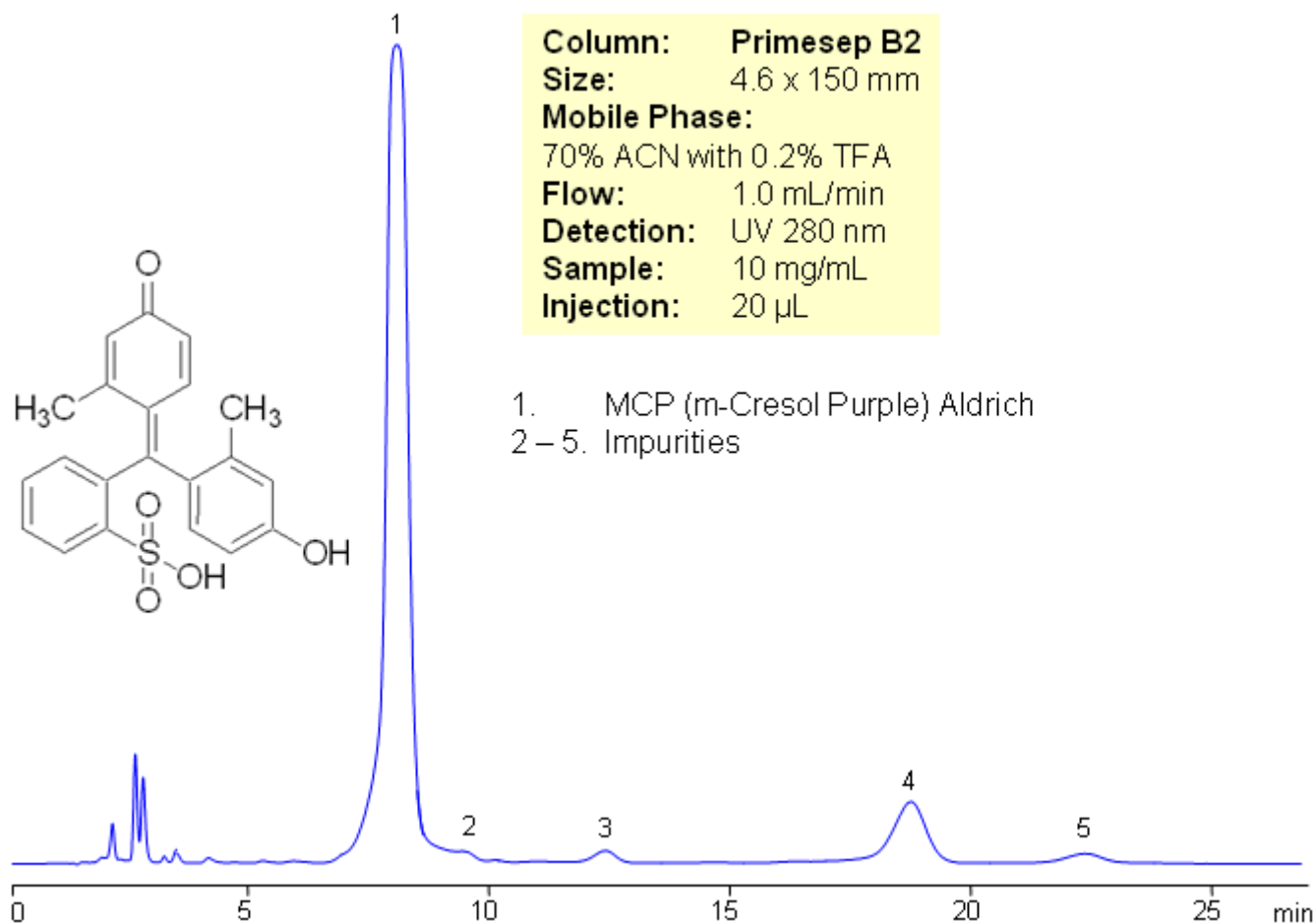


HPLC Separation of m-Cresol Purple and Related Impurities

<https://sielc.com/Application-HPLC-Separation-of-M-Cresol-Purple-and-Related-Impurities>

Chromatogram



Description

m-Cresol purple is indicator dye for spectrophotometric pH measurements. These measurements are widely used in oceanic CO₂ research. Purity of the indicator is a critical issue in accurate determination and can cause uncertainty in pH measurement. Numerous attempts to purify m-cresol purple failed due to lack of separation or low loadability of HPLC columns. Primesep B2 method separates 4 major impurities from main compound. All impurities are well separated. m-Cresol Purple is hydrophobic and acidic in nature. Parent compound and impurities are retained based on reverse phase and anion-exchange mechanisms. Method can be used for high loadability preparative separation of acidic dyes.