SFL 3 LSD Screen

Separation of Controlled and Non-controlled Substances by Liquid Chromatography

Scope: Limited purpose (LSD, LAMPA, Iso-LSD)

Sample Preparation:

Samples must be prepared in water, methanol, acetonitrile, or buffer. It is recommended that samples prepared in methanol or acetonitrile be diluted into water or buffer.

Method Parameters:

Instrument: Waters I-Class UPLC equipped with a PDA detector
Column: Waters Acquity UPLC BEH C18, 1.7 µm, 2.1 x 100 mm
Column Temperature: 40°C
Buffer/Mobile Phase: A: 20 mM Phosphate Buffer, pH 2.3 with 0.2% hexylamine and 25 mg/L of sodium azide; B: Acetonitrile
Minimum Injection Volume: 0.5 µL
Gradient Set Points: Isocratic (85% A, 15% B)
Flow Rate: 0.5 mL/min
Detection Wavelength (if used in method validation): 210 nm(+/- 1.2 nm)
Minimum Run Time: 5.5 minutes

Limitations: See individual instrument validation reports.

Acceptance Criteria (unless otherwise noted in individual validation report):

Selectivity: Target compounds are visually separated and observed as a single peak with a clear, non-splitting apex. Peak fronting/tailing, if observed, does not preclude the detection of closely eluting peaks. A minimum S/N =3 is observed. Earliest eluting compound met minimum retention factor criteria and fulfilled the repeatability and reproducibility acceptance criteria.

Repeatability: Individual retention times measured are within 0.1 minutes of the average of 30 injections, and/or the individual relative retention times are with 1% of the average of 30 injections.

Reproducibility: Individual retention times measured during 6 weeks are within 0.1 minutes of the values measured on week 1, and/or the individual relative retention times during 6 weeks are with 1% of the values measured on week 1.

SFL 3 Phenethylamine 1

Separation of Controlled and Non-controlled Substances by Liquid Chromatography

Scope: Limited purpose (Pseudoephedrine, Methamphetamine, 3,4-MDMA, Caffeine)

Sample Preparation:

Samples must be prepared in water, methanol, acetonitrile, or buffer. It is recommended that samples prepared in methanol or acetonitrile be diluted into water or buffer.

Method Parameters:

Instrument: Waters I-Class UPLC equipped with a PDA detector
Column: Waters Acquity UPLC BEH C18, 1.7 µm, 2.1 x 100 mm
Column Temperature: 50°C
Buffer/Mobile Phase: A: 20 mM Phosphate Buffer, pH 2.3 with 0.2% hexylamine and 25 mg/L of sodium azide; B: Acetonitrile
Minimum Injection Volume: 0.5 µL
Gradient Set Points: Isocratic (94% A, 6% B)
Flow Rate: 0.5 mL/min
Detection Wavelength: 210 nm(+/- 1.2 nm)
Minimum Run Time: 3.5 minutes

Limitations: See individual instrument validation reports.

Acceptance Criteria (unless otherwise noted in individual validation report):

Selectivity: Target compounds are visually separated and observed as a single peak with a clear, non-splitting apex. Peak fronting/tailing, if observed, does not preclude the detection of closely eluting peaks. A minimum S/N =3 is observed. Earliest eluting compound fulfilled the repeatability and reproducibility acceptance criteria.

Repeatability: Individual retention times measured are within 0.1 minutes of the average of 30 injections, and/or the individual relative retention times are with 1% of the average of 30 injections.

Reproducibility: Individual retention times measured during 6 weeks are within 0.1 minutes of the values measured on week 1, and/or the individual relative retention times during 6 weeks are with 1% of the values measured on week 1.