SFLT

Method: LTM MTPA FRONT

Separation of Controlled and Non-controlled Substances by Gas Chromatography

Scope: Limited purpose (All isomers of methamphetamine)

Sample Preparation:

Samples will be based extracted into a suitable solvent, including but not limited to methanol, chloroform, acetone, petroleum ether, ethyl ether, methylene chloride, ethyl acetate, xylenes and hexane, or any combination of these, and pyridine derivatized with MTPA.

Method Parameters:

Instrument: Gas Chromatograph HP/Agilent 7890B LTM equipped with an FID detector
Column Type and Dimensions: DB-CSI 15mx0.250mmI.D.x0.25µm film thickness in LTM; 1mx0.18mm segment heated in oven, 5% phenyl methylpolysiloxane stationary phase (or equivalent)
Inlet Temperature: 270°C
Minimum Injection Volume: 1µL
Injection Mode: Split
Maximum Split Ratio: 50:1
Carrier Gas and Flow: Hydrogen 1.5mL/min
Make-up Gas: Nitrogen
Control Mode: constant flow
Oven Program Set Points: 270-300°C at 10°C/min
LTM Program Set Points: ramp at 10°C/min from 220°C to 250°C
Minimum Run Time: 3.0min
Detector Temperature: 300°C

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/or fulfilled the repeatability and reproducibility acceptance criteria.

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

Reproducibility: Individual retention times measured for representative compounds 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 within 1% of the values measured on week 1.

SFLT

Method: LTM SCREEN FRONT

Separation of Controlled and Non-controlled Substances by Gas Chromatography

Scope: General Purpose

Sample Preparation:

Samples will be prepared at a suitable concentration for identification and in any appropriate solvent, including but not limited to methanol, chloroform, acetone, petroleum ether, ethyl ether, methylene chloride, ethyl acetate, xylenes and hexane, or any combination of these. Internal standards, such as tetracosane, may be used. Perform filtration, centrifugation, derivatization and acid/base extraction as necessary.

Method Parameters:

Instrument: Gas Chromatograph HP/Agilent 7890B LTM equipped with an FID detector
Column Type and Dimensions: DB-CSI 15mx0.250mmI.D.x0.25µm film thickness in LTM; 1mx0.18mm segment heated in oven, 5% phenyl methylpolysiloxane stationary phase (or equivalent)
Inlet Temperature: 280°C
Minimum Injection Volume: 1µL
Injection Mode: Split
Maximum Split Ratio: 50:1
Carrier Gas and Flow: Hydrogen 2.0mL/min
Make-up Gas: Nitrogen
Control Mode: constant flow
Oven Program Set Points: 270-315°C at 15°C/min
LTM Program Set Points: ramp at 60°C/min from 95°C hold 0.2min to 310°C
Minimum Run Time: 5.5min
Detector Temperature: 300°C

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, including a low level (0.5%) marker compound. Earliest eluting compound met minimum retention factor criteria and/or fulfilled the repeatability and reproducibility acceptance criteria.

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

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