SFL3

Method: NMR_1H_1

Identification of Controlled and Non-controlled Substances by Nuclear Resonance Spectroscopy

Scope: General purpose (Proton)

Procedure:

Sample dissolved in deuterated solvents. Insoluble material filtered or removed from sample. Recommended sample concentration: 5-25 mg/mL in a 5 mm ID NMR tube.

Method Parameters:

Instrument: Varian 400-MR
MHz: 400
Minimum Spectral Range (ppm): 1-13
Minimum Delay between Pulses (seconds): 1
Minimum Pulse Angle (degrees): 1-90
Minimum Acquisition Time: 2 seconds
Minimum Number of Scans: 8

Limitations: See individual instrument validation reports.

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

Accuracy: Analyte spectra are compared to a verified reference database, commercial library, published literature spectra, or spectra from another ISO/IEC 17025. Overall sample spectral pattern corresponds to that of the reference spectrum acquired using the same solvent. All signals in the sample spectra were within 0.2ppm (^{1}H-NMR) of those in the reference spectrum. No unexplainable extraneous signals are observed in the sample spectrum.

Repeatability and Reproducibility: The repeatability and reproducibility of confirmatory methods is established via evaluation of system-wide historical spectral data.