SFL3

Methods: DEA-FTIR-2; DEA364317_IR1; DEA364368_IR1; DEA-FTIR-1

Instruments: DEA364303; DEA364367; DEA364317; DEA364368; DEA364369; DEA364370

Identification of Controlled and Non-controlled Substances by Solid-Phase Infrared Spectroscopy

Scope: General purpose

Sample Preparation:

Sample will be analyzed either by direct analysis, sublimation, or extraction with any appropriate solvent, including but not limited to methanol, chloroform, acetone, petroleum ether, ethyl ether, methylene chloride, water, ethyl acetate, xylenes and hexane, or any combination of these.

Method Parameters:

Instrument: Thermo-Nicolet iS10
Number of Background Scans: 8 Scans
Minimum Number of Sample Scans:

- *DEA364303; DEA364367; DEA364369; DEA364370***:** 8 Scans
- *DEA364317; DEA364368*: 1 scan

Scan Range:

- *DEA364303; DEA364367*: 399-4000 cm^{-1}
- *DEA364317*: 400-4000 cm^{-1}
- *DEA364368; DEA364369; DEA364370*: 525-4000 cm^{-1}

Sample Gain: Autogain
Resolution: 4.000 cm^{-1}
Optical Velocity:

- *DEA364303; DEA364367; DEA364368; DEA364369; DEA364370*: 0.4747 cm/s
- *DEA364317*: 0.6329 cm/s

Aperture: 150.00 (open)
Accessory:

- *DEA364303; DEA364317***:** Smart Golden Gate KRS-5
- *DEA364367; DEA364368; DEA364369; DEA364370*: Smart iTX diamond crystal

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 spectra or spectra from another ISO/IEC 17025 accredited laboratory. The overall sample spectral pattern corresponds to that of the reference spectrum and the prominent, well-defined, measured signals in the sample spectrum were all within 4 cm^{-1} of those in the reference spectrum. No prominent 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.