Agilent 7010 GC-TQ

Agilent 7010 Specifications

- Operational Modes
    a. EI
    b. PCI & NCI
- Acquisition Modes
    a. Scan: MS1 & MS2
    b. SIM: MS1 & MS2
    c. dMRM
    d. Product Ion
    e. Precursor Ion
    f. Neutral Loss & Gain
- Mass ranges from 10 to 1,050
- Mass accuracy
    a. 0.1 Da from m/z 5 to 1.000
- The dynamic range greater than 6.0 x 10^7
- Mass stability
    a. <0.1u over 24 hours
- Maximum scan rate of at least 20,000 Da/second
- Minimum MRM dwell time of 0.5ms

- Source cleaning
    a. JetClean
- Detector Triple-Axis HED-EM
- Resolution
    a. 0.7 to 2.5 Daltons, default tune
    b. 0.4 to 4.0 Daltons, custom tune
- Sensitivity in EI MRM mode such that a 1 µL of 2 fg/µL of octafluoronaphthalene (OFN)
    a. S/N ratio of at least 600:1 (transition of m/z 272 -> 222)
- Sensitivity in PCI MRM mode such that a 1 µL of 100 fg/µL benzophenone (BZP)
    a. S/N > 50:1 (transition of m/z 183 -> 105 (CH_4))
- Sensitivity in NCI MRM mode such that a 1 µL of 100 fg/µL OFN
    a. S/N > 2000:1 (transition of m/z 272 (CH_4))
- Instrument detection limit (IDL) in EI MRM mode
    a. 0.5 fg or less OFN
    b. Eight sequential injections of1 µL of 2 fg/µL OFN standard.
    c. MS/MS transition of m/z 272 -> 222 (100 msec dwell time)
- Instrument detection limit (IDL) in PCI MRM mode
    a. 1 µL of 5 pg/µL BZP standard.
    b. MS/MS transition of m/z 183 -> 105 (CH_4)

Agilent 8890 Specifications:

- CTC PAL3 Injector & Available Tools
    a. Liquid Sampling
    b. Headspace (dynamic & static)
    c. SPME
- FID detector available
- Temperature setpoint resolution: 0.1 °C
- Supports 20 oven ramps with 21 plateaus. Negative ramps are allowed.
- Maximum achievable temperature ramp rate: 120 °C/min
- Maximum temperature: 450 °C
- Multimode injector & modes
    a. Hot or cold split/splitless
    b. Pulsed split/splitless
    c. Solvent vent
    d. Direct
- Split ratio: up to 7,500:1 to avoid column overload.

Contact the TRACES Manager for full details.