

# MDA Quantification in Jet Fuel

## MDAnalyzer™

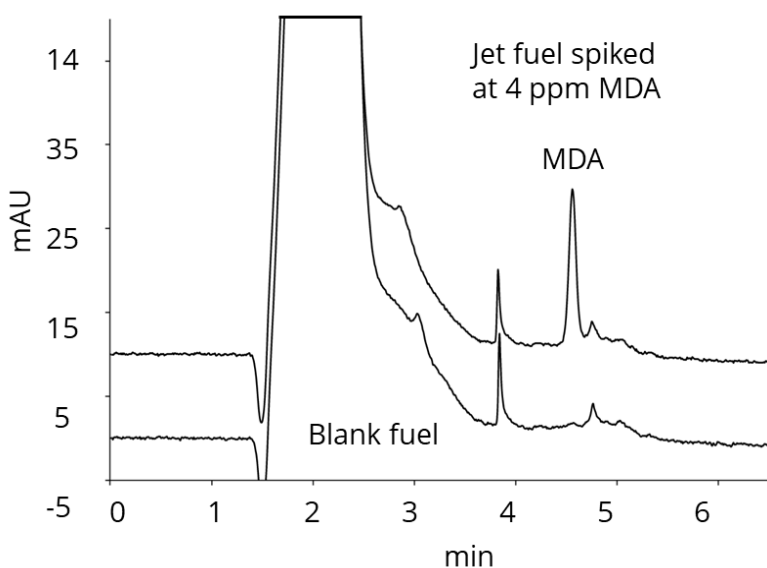
Rapid >> Portable >> Accurate



**Repeatability** – Retention time repeatability is under 1% RSD, and peak area repeatability is under 4% RSD (10 ppm MDA in Jet Fuel with blank Heptane runs between samples).

The **MDAnalyzer™** is a portable analyzer able to provide real time determination of the presence and specific concentration of Metal Deactivator Additive (MDA) in an aviation turbine fuel sample at installation level or in a field environment outside of a laboratory. The MDAnalyzer enables a technician to determine the presence and level of MDA in a fuel sample in 20-30 minutes. The current process requires samples of suspected thermally unstable fuel or fuel previously doped with MDA to be collected on site and then shipped to a laboratory, which can take 2-10 days for results. During this transit and analysis time, fuel inventories and fuel servicing equipment are placed in a quality hold status, preventing the ability to support aircraft or ground vehicle generation and mission requirements.

### MDA Spiked Into Jet A Fuel at 4ppm



- 15 cm x 300  $\mu$ m i.d., 3  $\mu$ m Inertsil Diol
- A: heptane, B: ethyl acetate + 5% acetonitrile
- 0.40 – 100% B in 9 min nonlinear program
- 7.5  $\mu$ L/min after 3 min equilibration
- 315 nm

