



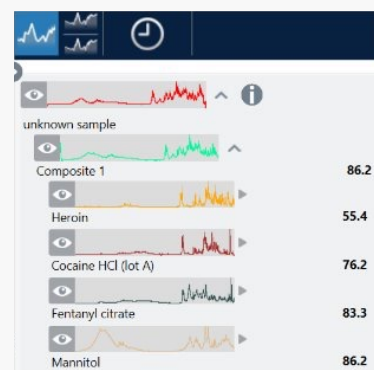
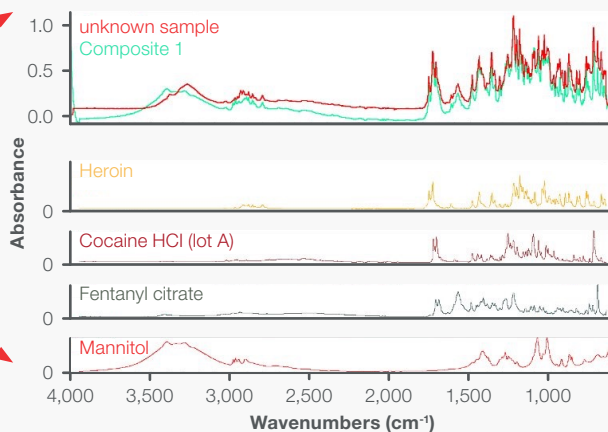
Know What You've Got: Unbiased Harm Reduction with FTIR

FTIR sees things as they really are.

Things aren't always what they seem, and ignorance isn't always bliss. Being unaware of certain information can sometimes lead to unexpected harm. FTIR (Fourier transform infrared spectroscopy) can tell you the components in a substance in a straightforward and unbiased way. When an FTIR instrument is used to analyze a sample, it can discern multiple components that might be mixed together in ways that are potentially harmful. Thermo Scientific™ Nicolet™ FTIR Spectrometers, outfitted with easy-to-use Thermo Scientific™ OMNIC™ Paradigm Software, offer unrivaled multicomponent analysis capability so you can know if a substance is pure or if it contains undesirable contaminants.

With FTIR, it only takes small amount to tell you a lot, in mere seconds.

Identifying unknowns by FTIR is simple and fast. Just place a small amount of solid samples onto a crystal window, and the FTIR instrument will shine a beam of infrared light onto the sample. By measuring how much infrared light is absorbed by the sample and at what frequencies, a "fingerprint" of the sample is generated in a few seconds. By comparing that spectral fingerprint of the sample to the spectra of known substances, the components of the sample can be identified.





Our extensive FTIR spectral libraries provide the crucial information needed for identification.

Nicolet FTIR spectrometers analyze compounds, and OMNIC Paradigm software separates out the individual components in the spectra. The final step to successful identification of unknown analytes, especially when the components contain subtle structural differences, involves comparison of the acquired spectra against libraries of known substances. Thermo Fisher Scientific boasts the most extensive library collection of psychoactive compounds in the industry, including many fentanyl analogues.

- Nicolet™ LEnS Library: a total of 11,409 spectra including hundreds of psychoactive compounds and cutting agents.
- **New:** Nicolet™ Narcotics Library: a total of 883 spectra of new psychoactive substances (NPS) including 190 fentanyl analogues.
- **New:** Nicolet™ Fentanyl Analogue Library: a dedicated library for fentanyl analogues with 182 spectra, including over 50 structural isomers.

Make informed decisions based on unbiased science.

We believe in choices—specifically, informed choices based on science and knowledge. Using FTIR spectroscopy to investigate pharmaceuticals, recreational drugs, and the presence of potential cutting agents can provide important insights about the composition and potency of substances. Armed with such knowledge, people can make more informed choices to mitigate potential risks and prioritize their well-being.



Nicolet Summit X FTIR Spectrometer (left) and Nicolet Apex FTIR Spectrometer (right).

- Quick and reliable identification of drugs and lacing agents.
- Easy to use, powered by robust hardware and intuitive software.
- Analyze a small amount of sample, with minimal sample preparation.
- Industry-leading multicomponent analysis capability.
- Most extensive library collection of psychoactive compounds and lacing agents.

Learn more at thermofisher.com/FTIR-forensic-library