

Product Note S44 04/20

B-TICTAC TICTAC ATR-FT-IR Drug Library



Why you need the TICTAC library:

The yearly reports from the European Monitoring Centre for Drugs and Drug Abuse (EMCDDA) (Fig. 1) clearly show the constant introduction of new illegal substances to the markets.

The TICTAC ATR-FTIR Drug Library includes ATR spectra from exactly these recently introduced drugs and new psychoactive substances (NPS) / "legal highs".

Combined with Bruker FTIR instruments, this spectral library ensures quick and easy identification for many of these new drugs.

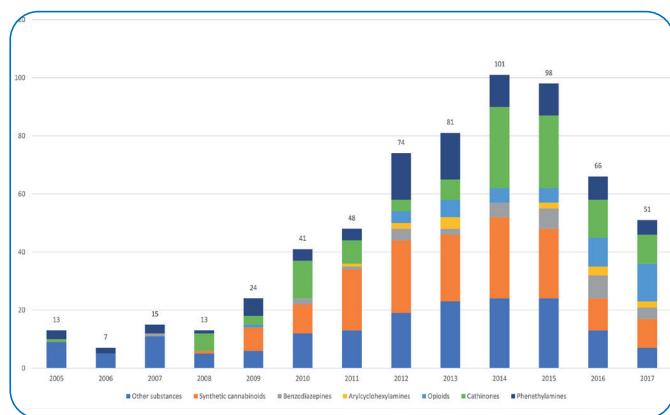


Fig.1: Number of new psychoactive substances notified to the EU Early Warning System for the first time, 2005–17.

Source: European Monitoring Centre for Drugs and Drug Addiction (2018), European Drug Report 2018: Trends and Developments, Publications Office of the European Union, Luxembourg.

What the TICTAC library offers:

The library has been carefully compiled by TICTAC Communications Ltd. using their enormous experience in street drugs analysis, containing a total of **643 spectra**.

It exclusively contains compounds that are likely to be encountered when testing contemporary street drugs. In addition to the drugs themselves, it also includes new "legal highs" as well as diluents and contaminants.

The library is composed of highest-quality spectra measured by TICTAC using a Bruker ALPHA II system and a Platinum diamond ATR module. As new drugs constantly enter the market the library is updated about once per year.

It contains new drugs such as:

- Fentanyl & derivatives
- Cathinones
- Phenethylamines
- Piperazines
- Tryptamines
- Aminoindanes
- NBOMe derivatives
- Synthetic Cannabinoids
- Cannabinoid receptor antagonists

And artifacts such as:

- Diluents (organic and inorganic) e.g. boric acid
- Household products confused with street drugs e.g. sugar

Basic library:

- B-TICTAC
TICTAC ATR-FTIR Drug Library
Includes **643 ATR spectra** from new drugs, new psychoactive substances (NPS), synthetic cannabinoid receptor agonists, and legal highs. The library is expanded constantly by new drugs entering the market. Updated versions of the library are released typically once per year.

Upgrade option:

- B-TICTAC-UP
The 2022 update adds **95 spectra** to the previous release of the TICTAC ATR-FTIR Drug Library.

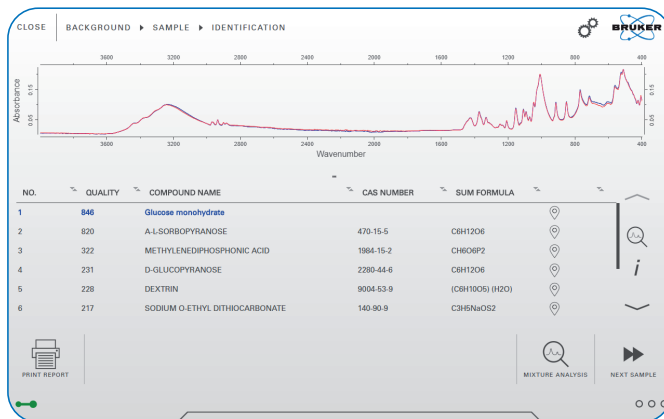


Figure 2: Analysis result in OPUS TOUCH. The integrated touch-PC makes ALPHA II and INVENIO even more robust and compact.



Fig 3: Analysis report of the identification of street drug components using the mixture analysis function of the OPUS software together with the TICTAC FTIR drug library.

