

FTIR spectrophotometer (Agilent Cary 630 FTIR)

User Manual

Precautions

1. The FTIR instrument is moisture sensitive. For smooth functioning always keep the humidity level of the chamber below 40%.
2. Always keep the instrument in switch on condition. (Green light on the instrument power button)
3. Do not clean the sample interface with harsh organic liquids like DMF, DMSO, NMP or any acids. Use of methanol, acetone or isopropyl alcohol is only permissible.

Measurement instructions

For any sample measurement, the following steps are taken:

- Clean the sample interface.
- Collect a background.
- Place the sample to be measured.
- Collect the sample measurement.

Before any measurement, clean the sample interface using a lint-free tissue with a suitable solvent such as methanol, acetone or isopropyl alcohol.

To collect a background measurement:

1. On the Home screen, ensure that the appropriate method is active, and then click START to initialize background sample analysis.
2. Click Next. A brief check of the sample interface (that is, the crystal) will occur. Following a successful test, the system gathers a 'background'. Background progress is indicated by a status bar.

To measure a sample:

1. Place a tiny amount of sample (powder) or 1 drop of liquid sample on the diamond crystal. After putting the sample press the sample tightly by downward rotating the anvil.
2. To begin sample measurement, (after background measurement) click the Start button on the Home screen.
3. Click the Next button. Clicking the Home button will stop the measurement and return you to the Home screen.
4. Enter a file name in the Sample ID field.
5. Click the Next button to begin sample measurement.

6. When the sample measurement is complete, the software will display the method results in the Results screen.
7. Export the results in the required format.

Identifying status of the instrument

The circle on upper right corner of the software window is a color indicator of the status of the instrument.

1. Green: when the system is operating within the factory-defined parameters.
2. Red or yellow: indicates a parameter outside of specification.
3. Red or yellow: If the red or yellow condition cannot be resolved by changing parameters from the diagnostic option, contact Agilent for assistance.