

■ Main Specifications

EDXIR-Analysis Software

Item	Conditions
Applicable Models	EDX: EDX-7000/8000 FTIR: Instruments that can be controlled by LabSolutions IR/IRsolution/AIMsolution
Profiles and Spectral Data Types That Can Be Loaded	EDX profiles (*.datq1qn) LabSolutions IR data files (*.ispd) IRsolution data files (*.smf) AIMsolution data files (*.apit) JCAMP data files (*.DX, *.JDX)
Other Files That Can Be Loaded	Bitmap files (*.bmp) PNG files (*.png) JPEG files (*.jpg) PDF files (*.pdf)
Number of Libraries That Can Be Created	Up to 100 libraries
Number of Libraries That Can Be Used in Searches	Up to 64 libraries
Number of Data That Can Be Registered in a Library	2,000 data

Computer

Item	Conditions
Operating System (OS)	Microsoft Windows 7 Professional 32/64-bit Microsoft Windows 10 Professional 64-bit

EDXIR-Analysis

SHIMADZU
Excellence in Science

EDX-FTIR Contaminant Finder / Material Inspector

EDXIR-Analysis



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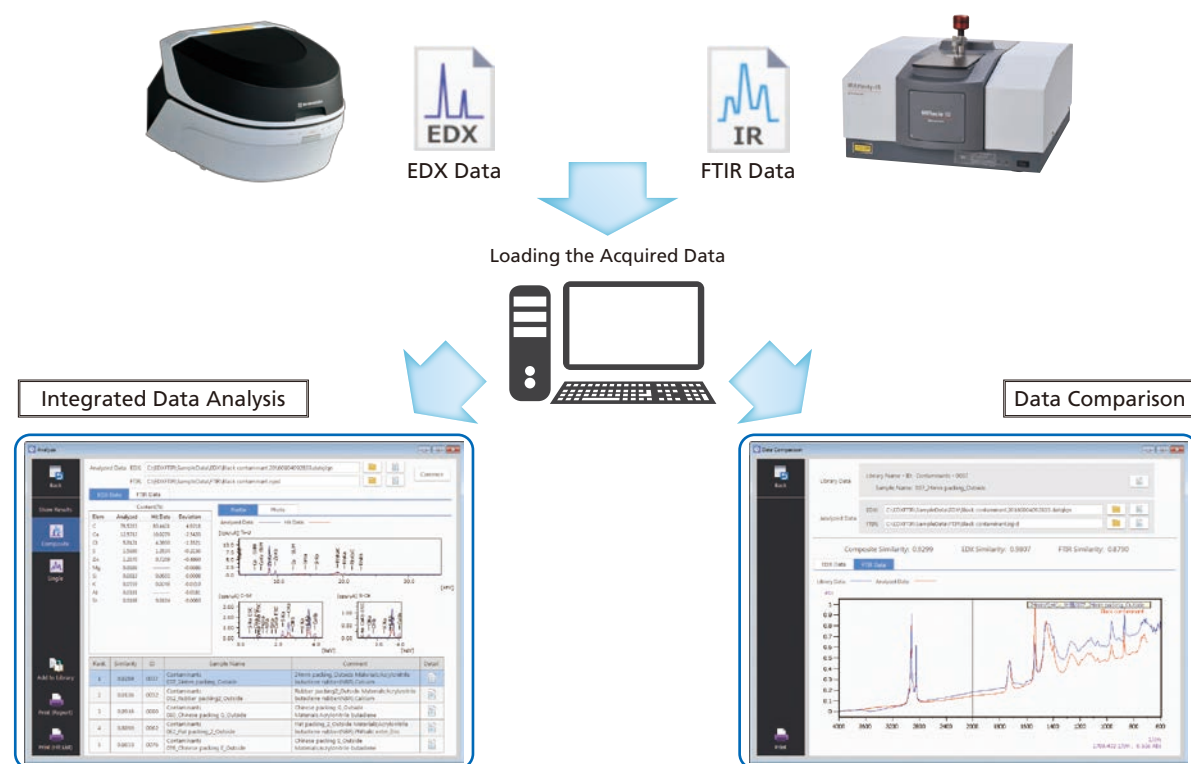
EDXIR-Analysis software is specially designed to perform qualitative analysis using data acquired by the energy dispersive X-ray fluorescence spectrometer (EDX) and the Fourier transform infrared spectrophotometer (FTIR). This software is used to perform an integrated analysis of data from FTIR, which is excellent at the identification and qualification of organic compounds, and from EDX, which is excellent at the elementary analysis of metals, inorganic compounds and other content. It then pursues identification results and the degree of matching. In addition, it can also be used to perform EDX or FTIR data analysis on its own. The library used for data analysis (containing 485 data as standard) is original to Shimadzu, and was created through cooperation with water supply agencies and food manufacturers. Additional data can be registered to the library, as can image files and document files in PDF format.

It is also effective for the linked storage of various types of data as electronic files.

Integrated Analysis of Contaminant Data and Data Comparisons for Confirmation Tests

To perform qualitative analysis automatically, simple click "Analyze Both Data" and select the EDX/FTIR data*1. This heightens the efficiency of data analysis that would be time-consuming for analysts, providing strong support for contaminant analysis. In addition to a list of hits, the integrated data analysis results show EDX profiles and FTIR spectra found as hits from the library. If the user wishes to browse the respective data analysis results, they can be checked by clicking "Single". In addition, with the data comparison function, which calculates the degree of matching between the actual measured data and the data registered in the library, the software can be used for countermeasures against "silent change"*2 and for other confirmation tests. Clicking the "Print" button prints the results in a fixed format and also saves them in Word format*3. The example noted below is from the analysis of black rubber contaminants, analyzed with the EDXIR-Analysis. From the integrated data analysis results, it is evident that the contaminant is acrylonitrile-butadiene rubber (NBR), which contains calcium carbonate and zinc stearate. In addition, from the results of the comparison of the data for 24 mm packing that is found as a hit and that for the black rubber contaminant, it is evident that the degree of matching for both data is 0.9424, which is very similar.

*1: Using the EDX profile, data is classified as inorganic, organic, and mixture. Integrated data analysis is performed by applying priority levels to each classification. (Patent pending)
 *2: A term used in Japan to indicate changes of materials by suppliers without the knowledge of the manufacturer.
 *3: Microsoft Word must first be installed.



Data Browsing and the Registration, Editing, Deletion of Data, Images, Document Files

By clicking "Edit" and selecting a library, the contents of the selected library can be checked. There will be a checkmark if the data has already been registered. By clicking "Detail", data, images, and document files that have already been registered can be browsed. From the menu list on the left, new content can also be registered or content can be edited and deleted. If data for the same sample was acquired by instruments other than EDX and FTIR instruments (such as LC, GC, GC/MS and SEM), it can be converted into PDF format and then registered, enabling linked storage to the EDX/FTIR data.

EDX Profiles, Quantitation Results, EDX Photographs, Comments, and Other Information

Photographs, Document Files, Comments, and Other Information

Browsing Registered Photographs

Browsing Document Files

FTIR Spectra and Comments

All Data Is Linked and Stored