

Sample preparation for XRF analysis of liquids

Contact us for more information

Why sample preparation?

One of the many benefits of X-ray fluorescence (XRF) spectrometry is that it requires very simple preparation of samples. However, keep in mind that XRF delivers the most accurate and reliable measurements when you pay close attention to sample preparation.

That being said, why are we preparing samples?

1. To get the material in the correct form to fit into the spectrometer.
2. To minimize particle size effect, mineralogical effect, and surface roughness.

Most liquids can be analyzed without further treatments. Simply use a specially developed plastic cup with a protective foil that acts as an X-ray transparent window. From oils and fuels to water or concentrated acid solutions, there's always a safe and practical way of analyzing liquid samples by XRF.

Liquid sample cups

Malvern Panalytical offers dedicated and single use [sample cups](#) in 32 or 40 mm diameter, with corresponding lids. These cups are carefully designed

with high standards in production control. They are safe to use and ensure that will get the best analytical conditions for any liquid (or loose powder) samples.

Foils

Choosing the best foil for a specific application guarantees the integrity of the cup and spectrometer as well as good analytical results. Factors such as chemical resistance to the samples (polymer composition), presence of low-level contaminants, thickness (robustness versus transmittance) and presentation form (convenience of use) all play an important role in the selection process.

Non-assembled or pre-assembled cups

Usually, cups are provided as separate plastic parts that you can easily assemble before use with the chosen foil. Alternatively, Malvern Panalytical also offer ready-to-use cups with different foil options. This may be an interesting alternative if you want to avoid any hassle with cup assemblage.





Why choose us?

When you make the invisible visible, the impossible is possible.

Our analytical systems and services help our customers to create a better world. Through chemical, physical and structural analysis of materials, they improve everything from the energies that power us and the materials we build with, to the medicines that cure us and the foods we enjoy.

We partner with many of the world's biggest companies, universities and research organizations. They value us not only for the power of our solutions, but also for the depth of our expertise, collaboration and integrity.

With over 2200 employees, we serve the world, and we are part of Spectris plc, the world-leading precision measurements group.

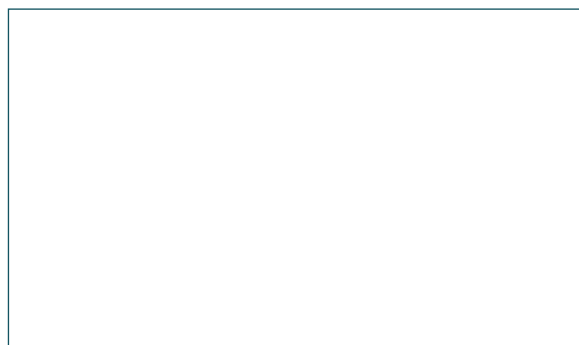
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Service & Support

Malvern Panalytical provides the global training, service and support you need to continuously drive your analytical processes at the highest level. We help you increase the return on your investment with us, and ensure that as your laboratory and analytical needs grow, we are there to support you.

Our worldwide team of specialists adds value to your business processes by ensuring applications expertise, rapid response and maximum instrument uptime.

- Local and remote support
- Full and flexible range of support agreements
- Compliance and validation support
- Onsite or classroom-based training courses
- e-Learning training courses and web seminars
- Sample and application consultancy



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