

Guide

Good sampling practice for SEM-EDS analysis



To ensure the best possible result, it is important that the sample is collected correctly, thereby minimizing the risk of contamination.

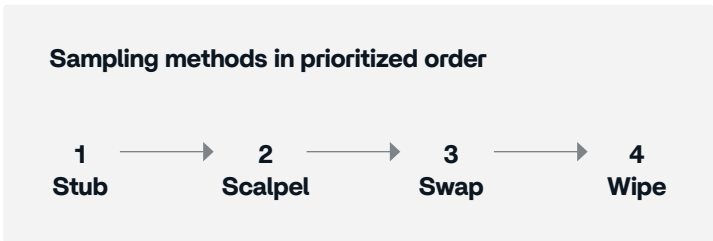
If the sample can simply be picked up, it should be placed in a sample container or on a stub with a sample ID.

If the sample is attached to a surface, the sampling method depends on both the type of sample and the sampling location.

Below is a prioritized list of sampling methods for samples that are attached to a surface.

Always use appropriate sampling materials.

We recommend using clean polypropylene cloths with a flat structure and polyester swabs without abrasive agents, as provided in our sampling kit.



1 – Stub

01. Open the plastic container. In the brown base, an aluminum stub with conductive carbon tape is mounted.
02. Remove the white protective paper from the stub to expose the black carbon tape.
03. Gently dab the adhesive carbon tape, without applying too much pressure, onto the surface from which the material is to be collected. Repeat in multiple locations, if needed, to ensure sufficient material is collected.
04. Close the plastic container and label it with the sample ID.



2 – Scalpel

01. Scrape the sample off using the scalpel. If the surface is soft, scrape gently.
02. Transfer the collected material to a stub.
03. Open the plastic container. In the brown base, an aluminum stub with conductive carbon tape is mounted.
04. Remove the white protective paper from the stub to expose the black carbon tape.
05. Gently press the scalpel with the sample onto the tape, without applying too much force, so the material is compressed and adheres to the tape. Place the sample as concentrated as possible on the tape.
06. Close the plastic container and label it with the sample ID.



3 – Swap

01. Only use suitable swabs for sample collection.
02. Scrape the sample off using the swab.
03. Use the smallest possible area of the swab for sampling.
04. Place the swab in a bag.
05. Label the bag with the sample ID.



4 – Wipe

01. Only use suitable wipes for sample collection.
02. Unpack the wipe.
03. Fold the wipe neatly. Do not crumble it.
04. Place the wipe over the sample and wipe the area using a finger on top of the wipe. Ensure the sample is concentrated in as small an area as possible. Avoid rubbing too hard.
05. Avoid using liquids or wet wipes if possible. If needed, only alcohol, never water.
06. Mark the area on the wipe where the sample was collected. If the wipe is soaked with alcohol, do not use a permanent marker.
07. Place the wipe in a bag.
08. Label the bag with the sample ID.

Avoid using tape or yellow Post-it notes for sample collection, as they contaminate the sample with adhesive and complicate the analysis.



Got questions or running low on sampling materials?

If you have any questions, need additional guidance, or would like to order a new sampling kit, either for yourself or a colleague, please contact our technicians, Karina and Mette. They are happy to assist and can dispatch sampling kits upon request.

Contact

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Please send samples to the following address

Remember to include sender information and notify us when the sample is on its way.

Force Technology
Midtager 3
DK-2605 Brøndby
Att: SEM-gruppen C1 – KHU / MEHP

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