

FAQ

codixx senSERS

1. General Information / Before you start

- senSERS substrates consist of silver nanoparticles (AgNPs) on glass (Schott B270®).
- They combine a robust glass platform with a silver nanoparticle surface, developed with more than 25 years of expertise in glass and nanoparticle technology.
- This design provides maximum signal enhancement, reproducible results, and reliable performance for Raman spectroscopy.
- To avoid distortion of measurement data, always use tweezers and do not touch the active area.
- Do not use solvents that react strongly with AgNPs, such as oxidizing agents (e.g., nitric acid) or chlorinated solvents.
- For best results, work in clean surroundings and ensure homogeneous analyte coverage. The limit of detection (LOD) may vary depending on the analyte and solvent. Both sides of the substrate are active and suitable for measurements.

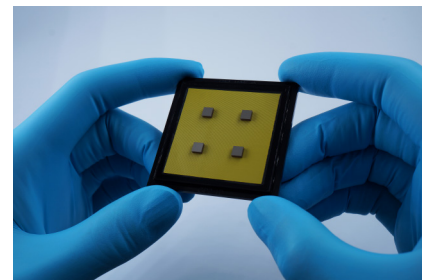
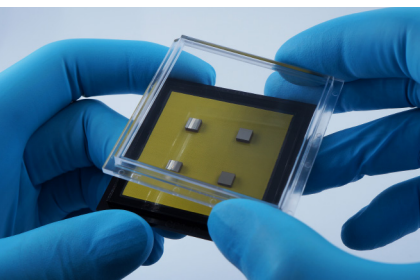
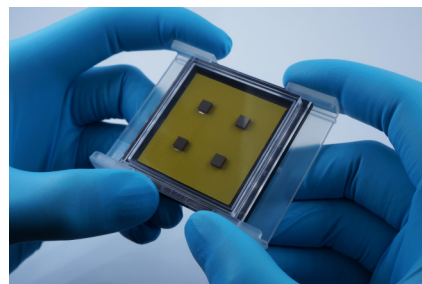
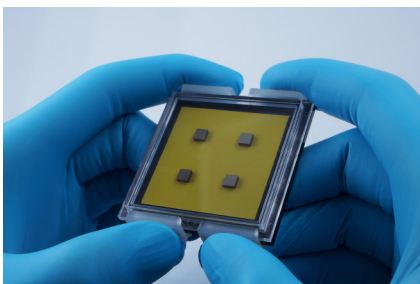
2. How to access / Handling of the packaging / Handling in general

- senSERS substrates are delivered either in a Gel-Tray or Waffle-Pack, secured by plastic clips. To prevent contamination of the active surface, always use tweezers for handling.

Handle the substrates carefully and avoid touching or scratching the active area.

To open the packaging safely:

- Hold the tray horizontally with the continuous parts of the clips facing down.
- Gently pull both clips apart along the edges until they release.
- Remove one clip first, then the second, and lift the lid.





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3. Storage

- Each senSERS substrate is delivered vacuum-packed.
- After removing the vacuum, store the substrates in a dry and dark environment to maintain quality.
- Keep them protected from humidity and direct light.
- Shelf life is approximately six months after removal from vacuum.

4. Sample preparation

Deposition of the analyte:

- Recommended sampling methods include drop deposition and immersion.
- Apply droplet(s) of the analyte solution to the active area and allow the solvent to evaporate, or immerse the substrate in the analyte solution for a defined period.
- The evaporation process can be accelerated by indirect heating or a dry nitrogen flow.

Drying options:

- Drying by a gentle nitrogen stream or in ambient air is possible.
- Avoid overheating or exposure to moisture during drying.
- Remove one clip first, then the second, and lift the lid.

5. Cleaning

- senSERS substrates are reusable, but cleaning may result in up to 50 % signal loss compared to the first use.

Recommended cleaning procedure:

1. Place the used substrate in a beaker filled with methanol.
2. Put the beaker in an ultrasonic bath filled with water.
3. Run the ultrasonic bath for about five minutes without heating.
4. Carefully remove the beaker — it may be hot.
5. Remove the substrate with tweezers, avoiding contact with the active surface.
6. Dry the substrate with a continuous flow of dry inert gas.
 - Alternatively, cleaning in an ultrasonic bath with methanol alone provides good results.

6. Disposal

- Unused senSERS substrates must be disposed of with non-recyclable waste.
- Disposal of used substrates depends on the analyte, solvent, and any resulting reaction or degradation products.



more details at
[codixx.com](https://www.codixx.com)