

Graphene Handling Instructions

Thank you for purchasing General Graphene's product: CVD Graphene on Copper/Substrate.

To ensure that our graphene serves your purpose as well as possible, please make sure to follow these handling instructions:

- 1. Graphene is on the top-side of the copper/substrate. It is a monoatomic layer on the surface of copper/substrate, and any scratches/contact could damage the film.
- Cutting graphene to size: If you need a smaller sized-graphene film, you can comfortably
 use scissors to size the copper sheet, but make sure the topside of the copper sheet
 remains untouched. Any fingerprints, glove touches, tweezer hits would damage the
 graphene film on top.
- 3. **Graphene transfer**: To transfer the graphene, you must have a support polymer on top of the graphene film. With a support polymer such as PMMA supporting the graphene film, you can then etch or delaminate the copper substrate.
 - a. Please note that handling graphene on a support polymer is a difficult process, and various issues including insufficient/thin PMMA, insufficient drying time, wrinkles in the transfer film, substrate adhesion issues may occur. We would recommend practice to ensure this process goes smoothly, and we are happy to help answer any questions you may have before transferring graphene.
 - b. <u>If you have received a graphene film on a substrate other than copper</u>, please note that the same cutting and handling instructions (point 2) apply to the substrate.
- 4. Graphene storage: We recommend storing the graphene on copper in a humidity-controlled cabinet, preferably in an inert environment. While graphene quality does not degrade over time, the underlying copper substrate may oxidize if stored in a warm, humid environment. If your copper substrate looks oxidized, please be assured that the graphene quality has not degraded. Please ensure that the graphene is stored in a clean environment free from dust, particulates or contaminants.