

LEIT-C-Plast™ Carbon Cement



Use Instructions

Leit-C-Plast™ "Carbon Cement" is a special adhesive material for the preparation of large specimens for scanning electron microscopy (SEM) and energy dispersive spectroscopy (EDS). Return to the product page in order to place an order for Leit-C-Plast.

Characteristics:

- High electrical conductivity
- Permanent plasticity
- Vacuum compatible/stable
- High adhesive strength
- Absent are any peaks that would show up in an EDS spectrum

Instructions for Use:

Leit-C-Plast is rolled and flattened between two plastic plates that are supplied with the kit. A small amount of Leit-C-Plast is separated with a spatula, applied to a sample mount (sometimes called the stub) and if necessary, further distributed with a glass rod.

The specimen to be examined is then pressed in to the adhesive material already applied to the sample mount. Specimens that are not conductive may immediately be either sputter or carbon coated, or if examination will be by FESEM, either chromium or osmium coated.

For reorientation on the specimen mount, or preservation of the specimen separated from the mount, the sample maybe removed by literally lifting it off of the adhesive. Small traces of Leit-C-Plast are easily removed by the use of alcohol.

Because of the permanent viscoelasticity of Leit-C-Plast, very large specimens can be mounted surrounded by a ring of Leit-C-Plast and then when appropriate, the large specimen can be reoriented on the mount without difficulty.

For the most precise work, sometimes a combination of Tempfix™ and Leit-C-Plast is recommended. With this protocol, the specimen is fixed to the surface of the sample mount with solvent-free low melting point Tempfix. The next step is to apply the electrically conductive Leit-C-Plast as a conductive bridge between the specimen and the Tempfix. The combination system can be inserted directly into the vacuum at this point because of their vacuum compatibility.

Thin strands of either Leit-C-Plast or Tempfix can be drawn down to a fiber point, which can be used as a pointer for special features that will later be examined by SEM.