Agar Scientific Ltd
Unit 7, M11 Business Link
Parsonage Lane, Stansted
Essex, UK CM24 8GF
t: +44 (0)1279 215 506
f: +44 (0)1279 813 105
e: sales@agarscientific.com
w: agarscientific.com

Leit C and Leit Thinners

AGG3300 & AGG3300A

Conductive Carbon Cement (CCC)

CCC is an electrically conductive cement for specimen mounting in SEM work, featuring good adhesive quality.

Due to its electrical conductivity all conductive specimens are ready for investigating immediately after drying of the cement. Non-conductive specimens must be coated with carbon or metal, but no additional treatment is necessary such as painting conductive bridges, which may contaminate the specimen by spreading of silverdag or solvent.

CCC contains only hydrogen, carbon and oxygen with no other residue after drying. For that reason, no characteristic spectral peaks are found in CCC. When analysed with an energy dispersive spectrometer, there is only the continuum to be found. If the entire specimen-holder is painted with CCC, the cement will mask the holder and there are no X-rays produced in the holder, which could interfere with the analysis of the specimen itself.

Application

For powders or very light specimens, a thin layer or for bulk specimens, a heavier layer is painted on the specimen-stub. If powders are to be mounted, allow a short drying period (of several minutes), so that the powder does not sink into the wet glue. Trial and error will show the correct pre-drying. Heavier specimens can be directly placed into the wet paint.

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After drying, only carbon (with acrylic binding agents) is left. Drying is simply the physical process of evaporation of the organic solvents. Depending upon the thickness of the layer, the drying time varies from a few seconds (very thin film) up to 30 minutes (for a heavy coat).

The rate of evaporation is set in such a way that the entire bottle can be used up without thickening of the contents – assumed closing the bottle after each use. If, however the viscosity does get too high, CCC-Thinner may be added.

Xylene or toluene easily cleans tools or instruments which were accidentally contaminated with CCC.