Technical Data Sheet

Replicating Sheet - Cellulose Acetate Film

Catalog #50420-30

This material is 35µm (0.0014") thick cellulose acetate. It is soluble in acetone.

For sample preparation, cut out a piece of the replica material of a size suitable to cover the area to be replicated. Place a drop or two of acetone on the specimen surface and apply the replica film immediately. Allow surface tension forces to pull the film down against the specimen; no pressure is required. The film should be left to dry for about 10 minutes; it will then separate very easily from any reasonably flat surface.

The replica can be stretched between two pieces of cellulose tape, structure side outwards, wrapped around a microscope slide and placed in a vacuum coating unit for shadowing and carbon evaporation. (Depending on the type of tape used, there may be out gassing in the vacuum chamber from the adhesives on the tape.)

The area of interest should be cut from the film, and laid carbon side up, onto microscope grids on a wire mesh standing in a dish of acetone, with the acetone just touching the bottom of the mesh.

After one hour, remove the grids from the mesh and wash individually in acetone before drying. After drying, the grids with the replica are ready for examination in the TEM.