

Richardson's Stain for epoxy semithin sections

Stock 1: 1% Azure II in dH₂O.

Stock 2: 1% Methylene Blue in 1% Borax (Sodium Borate)

Mix stocks 1:1 and store in a syringe with 0.22um filter.

Protocol (for 0.5 um EPON or LRGold sections):

- 1) Transfer sections to drop of ddH₂O on a glass slide and warm on a hot plate until water has evaporated.
- 2) Cover the still-warm sections with stain for 10-30 seconds.
- 3) Rinse with a stream of ddH₂O.
- 4) Dry sections with a jet of air then dry the entire slide with KimWipe

Results

Nice monochromatic stain, even stain intensity over section

Reference

Richardson KC, Jarett L, Finke EH (1960) Embedding in epoxy resins for ultrathin sectioning in electron microscopy. *Stain Technol.* 35: 313-325

Found in "Histologic Techniques In Electron Microscopy", published by the American Society of Medical Technology, 1979.