

J-602, RHODANINE METHOD FOR COPPER

Fixation: **10% Buffered Neutral Formalin** (F-113)

Embedding: Cut paraffin sections at 6 to 10 um. (Thicker sections may stain better)

PROCEDURE:

1. Hydrate slides to distilled water.
2. Incubate in Rhodanine working solution at 37°C for 18 hours.
*To prepare Rhodanine Working Solution mix:

Rhodanine Saturated Solution (J-602-1)	6ml
Distilled water	94 ml

Note: Shake stock solution before measuring and mixing solutions and shake working solution when pouring it on slides.
3. Wash well in several changes of distilled water.
4. Stain in diluted Mayer's Hematoxylin for 10 minutes.
*To prepare Diluted Mayer's Hematoxlin mix:

Mayers Hematoxylin (J-602-2)	50 ml
Distilled water	50 ml
5. Rinse with distilled water.
6. Quickly rinse in **Sodium Borate, 5%.** (J-602-3)
7. Rinse well with distilled water.
8. Dehydrate through 95% alcohol to absolute alcohol. Clear in Xylene, 2 changes each, and coverslip using a synthetic mounting medium.

Stain Results:

Copper	Bright red to red yellow
Nuclei	Light blue

Note: With low copper concentrations in tissue, slight fading may occur after coverslipping and the golden precipitate may be difficult to distinguish from lipofuscin.

References:

Sheehan and Hrapchack, Theory and Practice of Histotechnology. St. Louis, The Mosby Company 1980 p.230