



## GMS Fungus Stain Kit Grocott's Methenamine Silver

### Solutions Provided:

- #SSC1056-250 - **Chromic Acid, 5%**
- #SSC1095-250 - **Methenamine-Silver Stock Solution**
- #SSC1126-250 - **Sodium Borate, 5%**
- #SSC1185-250 - **Sodium Bisulfite, 1%**
- #SSC1079-250 - **Gold Chloride, 0.1%**
- #SSC1130-250 - **Sodium Thiosulfate, 2%**
- #SSC1093-250 - **Light Green Counterstain**

Working solution preparation (*prepare just before use*):

### Working Methenamine-Silver Solution

Sodium Borate, 5%:	2mL
Distilled Water:	25mL
<i>Mix then add</i>	
Methenamine-Silver Stock Solution:	25mL

### Conventional Procedure

1. Deparaffinize and hydrate sections through alcohol to distilled water.
2. Place sections in **Chromic Acid, 5%** at room temperature for **one hour** or in a preheated solution at **60°C for 5-10 minutes**.
3. Rinse slides in running tap water for a few seconds.
4. Place slides in **Sodium Bisulfate, 1%** for **1 minute**.
5. Rinse in running tap water for several minutes.
6. Wash in several changes of distilled water
7. Place sections in **Methenamine-Silver Working Solution** preheated to **58°C-60°C** for 15 minutes or until sections turn yellowish brown. After 15 minutes, rinse in distilled water and check section microscopically for proper silver impregnation (dark brown fungi). If silver impregnation is not adequate, return slides to Methenamine-Silver Working solution and recheck every 5 minutes.
8. Rinse slides in 6 changes of distilled water.
9. Tone in **Gold Chloride, 0.1%** for **2-5 minutes**.
10. Wash thoroughly in tap water.
11. Treat slides with 2% Sodium Thiosulfate for 2-5 minutes to remove unreduced silver.
12. Wash thoroughly in tap water.
13. Counterstain with **Light Green Counterstain**, for 90 seconds.
14. Dehydrate in 2 changes of 95% alcohol followed by 2 changes of 100% alcohol.
15. Clear and mount with appropriate mounting medium.

### Results:

Fungi:	Black
Mucin:	Taupe to Grey
Background:	Green