

MAY GRUNWALD- GIEMSA STAINING

May-Grunwald-Giemsa staining method is used for morphological inspection and differential counting of blood cells. May-Grünwald staining combines the effect of acidic eosin and alkaline methylene blue. Giemsa staining makes effect of azure. This staining stains all cellular components. The pH is a very important factor in staining, so any change will lead to wrong staining reaction. The limits of the most suitable pH are between 6.5 and 6.8.

- ✚ Stain the air dried blood smear specimen with **May-Grünwald** working solution for *5 min*.
- ✚ Wash with water.
- ✚ Stain with **Giemsa** working solution for *15 min*.
- ✚ Wash with water.
- ✚ Dry the slides in upright position at room temperature.
- ✚ Mount the slides with a coverslip for storing.

Notes : dissolve 5 ml of Giemsa dye in 50 ml of distilled water.

Results :

1. methylene blue → stains blue the acidic components of the cell
2. eosin → stains orange-red the alkaline components of the cell
3. azure → stains red and purple the basic cellular components