



## 2-6. Giemsa (Ref 4)

### Staining Procedures For Plastic Embedded Tissue

*Verified at the Applications Laboratory of the Biomedical Division, Sorvall Microtomes*

#### **SOLUTIONS:**

##### Giemsa Stock Solution

Either use a commercially available powder or make as follows:

0.4g Azure II-- eosin

0.2g Azure II

0.2g Azure B -- eosin

50.0ml Glycerin, reagent grade

50.0ml Methyl alcohol

Let stand at room temperature overnight. Pour unfiltered into a brown, well-capped bottle.

Store at room temperature.

##### **Giemsa Working Solution**

3.0ml Giemsa stock solution

39.0ml Distilled water

Acetic acid, 1% Titrate stain to pH 4.8 to 5.2

#### **STAINING PROCEDURE:**

1. Stain in Giemsa working solution -- 2 hours to overnight.
2. Rinse in 1% acetic acid for 1-2 quick dips.
3. Dip in 95% ethyl alcohol to clear plastic for 2-3 quick dips.

Blow dry.

Mount.

**NOTE:** Too red a color indicates either excess acidity of stain, over-differentiation with 1% acetic acid, or both.

**RESULTS:**

Red orange eosinophilic granules and pink erythrocytes are good indications of proper staining.

**Warning:** Some of the chemicals used for the staining procedures given in this section may be hazardous if misused. For this reason, read and observe all warnings and cautions provided by the manufacturer for each chemical before proceeding with a staining procedure.

**Note:** In order to prevent sections from loosening from the slides during staining, all sections should be heat-fixed (60°C to 100°C) to the slides for a minimum of 2-5 minutes prior to staining, preferably at the time the sections are mounted on the slides.