VOLU-SOL
BUSINESS OF CHEMICALS

STAT & STATIM STAIN (16/32/ 128 OZ.)

STAT STAIN:	STATIM STAIN:
VSS-016 (16 oz.)	VSM-016 (16 oz.)
VSS-032 (32 oz.)	VSM-032 (32 oz.)
VSS-128 (128 oz.)	VSM-128 (128 oz.)

Order online at **www.volusol.com**

INTENDED USE: Rapid hematology stain for use in differential staining of peripheral blood, bone marrow and blood parasites.

SUMMARY AND PRINCIPLES: Stat and statim stains are modifications of classical Wright and Wright-Giemsa Stain respectively. The necessary buffer salts are combined in stain solutions, allowing as short as 20 seconds for staining time and the use of distilled or deionized water as buffer and rinse. ***NOTE:** only use deionized or distilled water, never tap water.*

SPECIMEN PREPARATION: Either capillary or venous blood is acceptable. EDTA should be used as anticoagulant. Slides should be air dried, fixed with methanol and be stained within 4 hours of collection. Fixed slides can be stored for future staining.

PROCEDURE: Prepare a blood or bone marrow film on a slide and allow to dry. It is highly recommended to fix the slide with absolute methanol. Just a few drops will suffice. Prepare 3 containers (e.g., coplin jars). Fill the first container with either stat or statim stain. The second and third containers must be filled with either distilled or deionized water. Dip the slides in the first container. Dip blood smears for 15-25 seconds and bone marrow for 20-40 seconds. Take the slides out of the container. Remove the excess of stains by taping the slides on the paper towels. Dip the slides in the second and third container filled with distilled or deionized water. Remove the slide(s) from the last jar. Tap the slide(s) on a paper towel and let air dry. To prevent evaporation, keep stain tightly covered when not in use. Replace the stain in the first container when the volume becomes insufficient. Change the water in the second and third containers when an iridescent scum forms on the surface or when it becomes discolored (dark blue). Wipe the back of the slide(s) before applying oil and using microscope. Do not blot the smear. ***NOTE:** Never replenish by adding new stain.*

EXPECTED RESULTS: **PRECIPITATE FORMATION:** Inadequate or incorrect washing. Dust or dirty slide. **EXCESSIVE BLUE STAIN:** Over-staining, high pH of water. Inadequate washing. **EXCESSIVE RED STAIN:** Under staining. Low pH of rinsing water.

LEUKOCYTE: nuclei should appear bluish-purple. Acid stain yields pale-blue nuclei while an alkaline stain yields dark-blue leukocyte nuclei. **EOSINOPHILIC:** granules should appear red. Acid stain yields brilliant and distinct red granules, whereas alkaline stain yields deep gray or blue eosinophilic granules. **NEUTROPHILIC:** granules should appear violet to pink. Acid stain yields pale neutrophilic granules, whereas an alkaline stain yields dark, prominent neutrophilic granules. **LYMPHOCYTE:** cytoplasm should appear sky-blue. Acid stain yields pale-blue cytoplasm, whereas an alkaline stain yields gray or lavender lymphocyte cytoplasm. **ERYTHROCYTES:** appear buff pink. **PLATELETS:** appear purplish blue with red-purple granules. **BASOPHILS:** contain purplish-black basophilic granules. **MONOCYTES:** appear bluish gray cytoplasm with some purple granules.

STORAGE AND EXPIRATION: Store reagents at room temperature (70-77.9 °F/ 20-25.5 °C). Maximum intended shelf life is printed on the label. If the product is frozen, allow it to sit at least 12 hours at room temperature and then shake vigorously to re-dissolve before use. The stain is sensitive to water and should be stored in a tightly stoppered container.

WARNING: Danger! Flammable. Vapor Harmful. For in vitro diagnostic use only. May be fatal or cause blindness if ingested. Cannot be made nonpoisonous. Keep away from heat and open flame. Avoid repeated or prolonged breathing of vapor. Use only with adequate ventilation.

REFERENCES:

1. Wright, JH., Med. Res., 7,138 (1902)
2. Davidsohn, I., and Henry, JB., Clinical Diagnosis by Laboratory Methods. Saunders, 1974.
3. Wintrobe, MM., Clinical Hematology. 7th Ed. Lea & Febiger. Philadelphia.