



### **Product Specification**

IATA

: 3

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# MAY GRUNWALD'S EOSIN-METHYLENE BLUE SOLUTION

PRODUCT CODE 863970

Intended Use

May Grunwalds Stain is used primarily to stain peripheral blood smears, urine samples, and bone marrow.

#### Principle And Interpretation

May Grunwald's Blood Stains are basic and acidic dyes which induce multiple colours when applied to cells. Methanol acts as a fixative and also as a solvent. The fixative does not allow any further change in the cells and makes them adhere to the glass slide. The basic component of white cells (i.e. cytoplasm) is stained by the acidic dye and they are described as eosinophilic or acidophilic. The acidic components (e.g. nucleus with nucleic acid) take blue to purple, shades of the basic dyes and they are called basophilic. The neutral components of the cell are stained by both the dyes.

PARAMETER LIMIT

Description Dark blue coloured clear solution with greenish fluorescence.

Solubility Miscible with water and alcohol.

Suitability for microscopy To pass the test.

#### Directions

- 1. Prepare blood film on a grease free slide and air dry.
- 2. Treat the dried blood film with methanol for 3-5 minutes.
- 3. Stain slides with May- Grunwald stain solution for 3 minutes. (Note :Staining time may vary depending on concentration of stain, determine optimal staining time with a trial slide before proceeding).
- 4. Add equal amount of distilled water, tilt to mix and stain 1 minute.
- 5. Pour off fluid and without washing add about 10 drops of freshly buffer diluted Giemsa stain for 5- 10 minutes. Time required varies with the age of film, age of stain. and the kind of parasite). Sorensens buffer may be used for dilution (1:10).
- 6. Rinse with a quick ample jet of distilled water.
- 7. Air dry the smear and examine under oil.

#### Results

Nucleus or part of nucleus of protozoan: Red or carmine

Cytoplasm of protozoan: Blue Endulating membrane: Purple Chromatin of leukocytes: Purple

Basophil cytoplasm of agranulocytes: Blue

Eosinophil granule: Pink to red Neutrophil granules: Purple Red corpuscles: Pink or bluish.

Note(s): Assay (if applicable) method mentioned.

DANGER
HAZARD STATEMENTS: May cause drowsiness and dizziness. Highly flammable liquid and vapour. Fatal if inhaled. Toxic in UN No. : 1230

contact with skin. Toxic if swallowed. Causes mild skin irritation. Causes eye irritation. Causes damage to organ through prolonged or repeated exposure.

#### PRECAUTIONARY STATEMENTS :

**Prevention:** Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wear respiratory protection. Ground/bond container and receiving equipment. Do not breathe dust/fume/gas/mist/ vapours/ spray. Wear protective gloves/clothing. Use only outdoor or in a well ventilated area. Wear protective gloves and eye/face protection. Keep container tightly closed. Keep away from heat/sparks/open flame-No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.





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Response: immediately cal a POISON CENTER or doctor/physician. IF ON SKIN: Gently wash with plenty of soap and water. if eye irritation persists. Get medical advice/attention. IF INHALED: remove to fresh air and keep at rest in a position comfortable for breathing. If skin irritation occurs, seek medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of fire, use alcohol-type foam for extinction. IF SWALLOWED: immediately call a POISON CENTER or doctor/physician. Get medical advice/attention if you feel unwell. If on skin or hair: remove/take off immediately all contaminated clothing. Rinse with water/ shower. Specific treatment: refer to label or MSDS. Remove/take off immediately all contaminated clothing. Wash/decontaminate remove clothing before reuse; call a POISON CENTER or doctor/ physician if you feel unwell.

**Disposal:** allow to evaporate in safe open area (applicable for small quantities). The chemical should be burnt in a chemical incinerator equipped with burner and scrubber. If the volumes are large than 500ml and no incinerator and site of evaporation is not available then transfer the waste chemical to waste solvent drum for collection by specialist disposal company.

Hazard Pictogram(s):



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