



# Instructions for Use

## **IODINE SOLUTION FOR PARASITOLOGY**

Cat. no. Z66	Iodine, Dobell & O'Connor	15ml
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#### **INTENDED USE**

A weak iodine solution such as Dobell and O'Connor (diluted Lugol's) is recommended for use in staining protozoan cysts. This preparation is a 1:5 dilution of Lugol's Iodine.

#### **SUMMARY**

Iodine Solution is often used in wet mounts of concentrated fecal material. It is useful for staining glycogen and making nuclei visible in protozoan cysts. Protozoan cysts correctly stained with iodine contain yellow-gold cytoplasm, brown glycogen material, and paler refractile nuclei. Dobell and O'Connor's Iodine is similar in formula and function to D'Antoni's Iodine.

#### **FORMULA**

Ingredients per liter of deionized water:\*

Potassium Iodide	20.0gm
Iodine	10.0gm

<sup>\*</sup> Adjusted and/or supplemented as required to meet performance criteria.

#### STORAGE AND SHELF LIFE

Upon receipt store at 2-30°CC. (room temperature). Products should not be used if there are any signs of contamination, deterioration, or if the expiration date has passed. Product is light sensitive; protect from light.

The expiration date on the product label applies to the product in its intact packaging when stored as directed. The product may be used and tested up to the expiration date on the product label and incubated for the recommended incubation times as stated below.

Refer to the document "Storage" for more information.

#### **PRECAUTIONS**

This product may contain components of animal origin. Certified knowledge of the origin and/or sanitary state of the animals does not guarantee the absence of transmissible pathogenic agents. Therefore, it is recommended that these products be treated as potentially infectious, and handle observing the usual Universal Precautions for blood. Do not ingest, inhale, or allow to come into contact with skin.

This product is for *in vitro* diagnostic use only. It is to be used only by adequately trained and qualified laboratory personnel. Observe approved biohazard precautions and aseptic techniques. All laboratory specimens should be considered infectious and handled according to "standard precautions." Refer to the document "Guidelines for Isolation Precautions" from the Centers for Disease Control and Prevention.

For additional information regarding specific precautions for the prevention of the transmission of all infectious agents from laboratory instruments and materials, and for recommendations for the management of exposure to infectious disease, refer to CLSI document M29: *Protection of Laboratory Workers from Occupationally Acquired Infections*.

Sterilize all biohazard waste before disposal.

Refer to the document "Precautions When Using Media" for more information.

#### **PROCEDURE**

Specimen Collection: Specimens should be handled in accordance with recommended guidelines. (6)

Method of Use: Place one (1) drop of Iodine Solution on a clean glass slide. Thoroughly mix a small portion of feces or fecal suspension with Iodine Solution. Mount specimen with a glass coverslip and seal, if desired. Examine the preparation microscopically for characteristic intracellular structures. In a properly stained cyst, the glycogen appears reddish-brown, the cytoplasm is yellow, and the chromatin stains brown to black.

#### **LIMITATIONS**

With a few exceptions, organisms should not be identified on the basis of a wet mount alone. Permanent stained smears should be examined to confirm the identification of suspect organisms. For more information, consult appropriate references. (6)

Iodine preparations will fade quickly if exposed to light. If several preparations are made, slide covers or folders should be used to minimize light exposure.

Certain medications, such as mineral oil, barium sulfate, absorbable anti-diarrheal preparations, anti-malarials, and some antibiotics may prevent the detection of intestinal protozoa.

Refer to the document "Limitations of Procedures and Warranty" for more information.

#### MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as loops, needles, incubators, microscopes, pipets, incinerators, glass microscope slides and coverslips, etc., are not provided.

#### **QUALITY CONTROL**

#### **USER QUALITY CONTROL**

It is recommended that each new lot of reagent be tested with known controls and retested at least each week of use thereafter. (3)

Check the performance of the reagent by testing with a known fresh reference specimen. Old reference specimens may yield unacceptable results.

Human WBC's mixed with negative stool can be used as a QC specimen. The human cells will stain the same color as that seen in protozoa.

#### PHYSICAL APPEARANCE

Iodine, Dobell & O'Connor should appear yellow-brown in color.

### **REFERENCES**

- 1. Anderson, N.L., et al. *Cumitech 3B; Quality Systems in the Clinical Microbiology Laboratory*, Coordinating ed., A.S. Weissfeld. American Society for Microbiology, Washington, D.C.
- 2. Isenberg, H.D. *Clinical Microbiology Procedures Handbook*, Vol. I, II & III. American Society for Microbiology, Washington, D.C.
- 3. Koneman, E.W., et al. *Color Atlas and Textbook of Diagnostic Microbiology*, J.B. Lippincott Company, Philadelphia, PA.
- 4. *Quality Assurance for Commercially Prepared Microbiological Culture Media*, M22. Clinical and Laboratory Standards Institute (CLSI formerly NCCLS), Wayne, PA.
- 5. Tille, P., et al. Bailey and Scott's Diagnostic Microbiology, C.V. Mosby Company, St. Louis, MO.
- 6. Versalovic, J., et al. Manual of Clinical Microbiology. American Society for Microbiology, Washington, D.C.

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IFU-10500[A]



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