Lugol's Iodine

Intended use
Lugol's Iodine is used as staining solution for wet mount and other Haematology staining.

Summary
Lugol's Iodine is intended to be used for the detection of intestinal protozoa and helminth ova or larvae in wet mount preparations and concentration techniques. It is non- specific, rapid contrast dye that is added to direct wet mounts of fecal material to aid in differentiating parasitic cysts from host white blood cells. Many protozoa and cysts take up dye and appear brown while other objects in the sample remain clear.

Principle
Lugol's Iodine stain the protozoan nuclei and intra-cytoplasmic organelles brown making them easier to identify. Dilution is necessary prior to use as strong iodine solutions tend to coagulate fecal particles and destroy the refractile nature of protozoan organisms. For fresh, unpreserved fecal samples, a direct wet mount should be prepared to detect the presence of motile protozoan trophozoites.

Reagent / Contents

Iodine	5.0 g
Potassium iodide	10.0 g
Distilled water	100.0 mL

Appearance
Dark reddish brown coloured solution.

Storage and Stability
Store at 15°C-30°C in tightly closed container and away from bright light. The stability of Lugol's Iodine is as per the expiry date mentioned on the label.

Materials required but not provided
Clean grease-free glass slide, loops, forceps, staining rack, blotting paper,microscope.

Type of Specimen
Clinical sample: Fecal samples.

Procedure
1. Dilute Lugol's Iodine 1:5 with sterile de-ionized water prior to use. (This is working solution should be freshly prepared approximately every 3 weeks).
2. Prepare a direct smear of the specimen by mixing a small portion (2 mg) of feces / specimen with a drop of sterile physiological (0.85%) saline on a clean dry glass slide.
3. Place a coverslip over the sample and examine the wet mount preparation for the presence of motile protozoa. The organisms are very pale and transparent and are more easily observed under low light intensity.
4. After thorough examination of wet mount has been a drop of Lugol's Iodine (working solution) can be placed at the edge of coverslip, or a new mount can be prepared using iodine alone. The prepared slides can be sealed if desired.
5. Examine the slides for the presence of brown parasitic structure.

Interpretation of Results
Glycogen is stained as reddish brown; cytoplasm is stained yellow colored and nuclei remains as Light refractile bodies.

Warranty
This product is designed to perform as described on the label and pack insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

References

1. Garcia LS, Bruckner DA. Diagnostic medical parasitology. New York: Elsevier, 1988.
2. Forbes BA, Sahm DF, Weissfeld AS. Bailey and Scott's diagnostic microbiology. 10th ed. St. Louis: Mosby, 1998.
3. Murray PR, Baron EJ, Pfaller MA, Tenover FC. Manual of clinical microbiology. 7th ed. Washington: ASM, 1999.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation

Cat No.	Product	Pack Size
207120410100	Lugol's Iodine	100 mL