

## K1651 WEE-TAB UREA/INDOLE VER. 0405

### DISCUSSION

Several species of Enterobacteriaceae, including Proteus, Klebsiella and some Citrobacter, produce the enzyme urease. This enzyme hydrolyzes urea into ammonia, water, and carbon dioxide. The alkaline ammonia then turns the pH indicator pink.

The degradation of the amino acid tryptophan releases indole which is detected with the addition of Kovacs' reagent to form a deep red color ring on the surface of the tube.

KEY Urea/Indole tests may be used for other types of bacteria as well, including anaerobes and Campylobacter.

### ACTIVE INGREDIENTS:

Each tablet contains approximately 5 mg. of urea, and 2.5 mg. of tryptophane.

### MATERIAL SAFETY DATA:

This product does not contain any material known at this time to be hazardous.

### MATERIALS REQUIRED

KEY WEE-TABS require preliminary growth on culture media appropriate for the specimen. Consult a reference manual such as the Manual of Clinical Microbiology for suggestions. K1651 WEE-TABS Urea/Indole is provided ready-to-use in tubes, 28 per package. You will need a loop for harvesting colonies, distilled water, and Kovacs' Reagent (Catalog K170).

### STORAGE

Store tightly closed in a dry place.

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### INSTRUCTIONS

- 1) Add 5 drops - 0.5 ml. of distilled water to the test tube.
- 2) Inoculate heavily from isolated colonies.
- 3) Incubate aerobically at 35-37 C. regardless of organism type.
- 4) After 1 hour, if the urease is positive, perform the indol test. If the urease appears negative, return the test to the incubator for up to 6 hours. Some organisms (or insufficient inoculum) may be slower to react. After 6 hours or when the urease is positive, perform the indol test.
- 5) To perform the indole test, add 2 drops of KEY Kovacs' Reagent (K170) to the tube. Let stand 3-4 minutes without shaking. A positive test will develop a cherry red color in the top layer.

### QUALITY CONTROL

The tablets should be tested prior to use with organisms of known reactivity. Discard used tests in a manner conforming with accepted laboratory procedures for bio-hazardous materials.

### REFERENCES

- (1) Manual of Clinical Microbiology, Fifth Edition, Chapter 36, "Enterobacteriaceae".
- (2) Bailey and Scott's Diagnostic Microbiology, Seventh Edition, Chapter 27 "Enterobacteriaceae".



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K1651-0805

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