Swab-it PYR

DISCUSSION:

Enzymatic hydrolysis of PYR (L-pyroglutamic acid ß-naphthylamide, aka pyrrolydonyl-ß-naphthylamide) releases free ß-naphthylamine which is detected and shown by the color change after adding developer.

ACTIVE INGREDIENTS:

The swabs contain L-pyroglutamic acid ß-naphthylamide. Naphthylamides have been identified as possible carcinogens. However, when used as directed the swabs present no hazard. The developer contains a small amount of hydrochloric acid, is poisonous, mildly corrosive, and stains clothing and hands. Handle with care. Consult poison control center if ingested.

MATERIAL REQUIRED:

The test requires fresh 24 hour growth on plated media. Consult a suitable manual for recommended media for the specimen. Swab-it PYR is sold in packs of 25 (K97153825) or 100 (K971538) with developer included.

INSTRUCTIONS:

- (1) Lightly pick up several isolated colonies with the dry swab, taking care not to pick up agar. Harvest enough colonies to see a paste on the swab.
- (2) Place the swab across your plate and wait 2-5 minutes at room temperature. You may also drop the swab into a tube containing 2-3 drops of neutral pH distilled water.
- (3) Place a drop of developer on the lid of the plate or onto a slide and soak it up with your test swab. Wait at least 1 but not more than 2 minutes for color to develop. NOTE: Do not drop the developer directly onto the swab as it will roll off and not absorb.

INTERPRETATION:

The appearance of a dark pink to red color is positive. Indole reactions of organisms grown on any media containing tryptophane (e.g. blood agar) may interfere but will still produce predictable reactions. From such media, positive PYR reactions will range from dark pink or red (PYR+/indol-) to magenta (PYR+/indole+). Green or turquoise (indole+), and yellow (indol-) are all PYR negative *. Disregard pale pink reactions - this is a reaction to the reagent only and not related to the PYR results.

STORAGE:

Store swabs and developer, tightly sealed, at 2-8C. All items may be used cold. The pack currently in use may be kept on the counter, tightly closed. If left at room temperature more than 14 days, QC should be done daily on remaining product.

QUALITY CONTROL:

Each lot should be tested with known positive and negative organisms. Some suggested strains are listed. Dispose of all used material in a manner appropriate for bio-hazardous material. E. faecalis 29212=POSITIVE, S. agalactiae 13813 = NEGATIVE.

REFERENCES:

(1) Manual of Clinical Microbiology, Fifth Edition, Chapter 36, Enterobacteriaceae (2) Manual of Clinical Microbiology, Fifth Edition, Chapter 29, Streptococcus.

