**PRODUCT DATA SHEET** 



# **TBL 021 - BILE ESCULIN DISCS**

#### **INTENDED USE**

For detection of esculin hydrolysis in the presence of bile.

#### PRODUCT SUMMARY AND PRINCIPLE

Group D streptococci hydrolyze esculin to esculetin and dextrose. Esculetin reacts with an iron salt such as ferric citrate to form a blackish brown coloured complex. Rochaix found that esculin hydrolysis is an important criteria in the identification of enterococci. Meyer and Schonfeld observed that when bile was added to esculin medium, around 60% enterococci were able to grow and split the esculin while other streptococci could not. When a comparative study was performed by Facklam and Moody for presumptive identification of Group D streptococci, they found the bile esculin test as a reliable means of identifying Group D streptococci and differentiating them from other streptococci groups.

## **INSTRUCTION FOR USE**

Esculin impregnated disc is placed on the seeded Bile Esculin Agar Base (M340) plate and is incubated at 35-37°C for 18-24 hours.

#### QUALITY CONTROL SPECIFICATIONS

Appearance

: Plain filter paper discs of 6mm diameter

#### INTERPRETATION

Cultural response observed by placing Bile Esculin disc (TBL 021) on seeded Bile Esculin Agar Base (TM 037 plate), incubated at 35-37°C for 18-24 hours.

Microorganism	ATCC	Growth	Esculin hydrolysis
Enterococcus faecalis	29212	Luxuriant	Positive: blackening of media around the disc.
Streptococcus agalactiae	13813	Luxuriant	Negative: no blackening
Listeria monocytogenes	19118	Luxuriant	Positive: blackening of media around the disc.
Streptococcus pyogenes	19615	Luxuriant	Negative: no blackening

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### PACKAGING:

In pack size of 50 Discs/vl.

A- 902A, RIICO Industrial Area, Phase III, Bhiwadi-301019.



## STORAGE

Store at 2 - 8°C. Use before expiry date on the label.

#### REFERENCES

- 1. Rochaix, 1924, C. R. Soc. Biol., 90:771.
- 2. Meyer and Schonfeld, 1926, Zentralbl. Bacteriol. Parasitenkd. Infectionskr. Hyg. Abt. I Orig., 99:402.
- 3. Facklam and Moody, 1970, Appl. Microbiol., 20:245.
- 4. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd ed., Philadelphia: Lippincott. Williams and Wilkins.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only Revision: 08 Nov., 2019



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