

## 0.1% Peptone Water IV

### Intended Use

0.1% Peptone Water IV is used as a diluent in pharmaceutical testing.

### Summary

Peptone Water is particularly suitable as a substrate in the study of indole production. Peptic digest of animal tissue used in Peptone Water is rich in tryptophan content. Presence of indole can be demonstrated using either Kovac's or Ehrlich reagent. Peptone Water is also utilized as a base for carbohydrate fermentation studies with the addition of sugar and indicators such as bromocresol purple, phenol red or bromothymol blue. Peptone Water is recommended for studying the ability of an organism to ferment a specific carbohydrate which aid in differentiation of genera and species. Peptone water is formulated as per Shread, Donovan and Lee. Peptone Water with pH adjusted to 8.4 is suitable for the cultivation and enrichment of *Vibrio* species.

### Principle

Peptic digest of animal tissue provides essential nutrients. To study the fermentation ability of carbohydrates, saccharose, rhamnose, salicin are generally added in 0.5% amount separately to the basal medium before or after sterilization. The acidity formed during fermentation can be detected by addition of phenol red indicator, which shows a colour change of the medium from red to yellow under acidic conditions. If desired, Durham's tube may be used to detect the gas production if produced. To detect indole production, add 0.5 mL of Kovac's reagent to the tube and shake the tube gently. Appearance of a red colour indicates presence of indole.

### Formula\*

| Ingredients                    | g/L       |
|--------------------------------|-----------|
| Peptic Digest of Animal Tissue | 1.0       |
| Final pH (at 25°C)             | 7.1 ± 0.2 |

\*Adjusted to suit performance parameters.

### Directions

1. Bring the 0.1% Peptone Water IV bottle to the room temperature 22°C-30°C.
2. Use 0.1% Peptone Water IV as per required application.

### Quality Control

**Appearance:** Colourless, clear solution without any precipitate.

**Cultural Response:** Cultural response is studied by checking recovery on Soyabean Casein Digest Agar, (incubated at 30°C-35°C for ≤ 3 days for bacteria and ≤ 5 days for fungi), after 2 hours of incubation at 20°C-25°C.

| Organism (ATCC)                                          | % Survival after 2 hours (stored at 20°C - 25°C) |
|----------------------------------------------------------|--------------------------------------------------|
| <i>Staphylococcus aureus</i> subsp. <i>aureus</i> (6538) | ≥100%                                            |
| <i>Pseudomonas aeruginosa</i> (9027)                     | ≥100%                                            |
| <i>Bacillus spizizenii</i> (6633)                        | ≥100%                                            |
| <i>Candida albicans</i> 3147 (10231)                     | ≥100%                                            |

**Note:** Inoculum of cfu is 100-1000 cfu.

### Storage and Stability

1. Store the ready to use 0.1% Peptone Water IV at 15°C-25°C in a cool, dry place away from light.
2. Stability of the kit is as per expiry date mentioned on the label.

### Warranty

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

References

1. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

| Cat. No.     | Product Description | Pack Size |
|--------------|---------------------|-----------|
| 203161350100 | Bottle Media        | 100 mL    |

|                                                                                                       |                                                                                                                  |                                                                                                 |                                                                                                           |
|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
|  Temperature Limit |  Manufacturer                 |  Batch Code  |  Date of Manufacture |
|  Catalogue Number  |  Consult Instructions for use |  Use-by Date |  This way up         |

Revision: 0825/VER-03

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.