

## HiDip™ PCA-VRBA Medium

HD009

### Intended Use:

Recommended for microbial screening of food and water.

### Composition\*\*

Ingredients	g/ L
<b>Plate Count Agar</b>	
Tryptone	5.000
Yeast extract	2.500
Dextrose (Glucose)	1.000
Agar	15.000
Final pH ( at 25°C)	7.0±0.2
**Formula adjusted, standardized to suit performance parameters	
<b>Violet Red Bile Agar</b>	
Peptone	7.000
Yeast extract	3.000
Sodium chloride	5.000
Bile salts mixture	1.500
Lactose	10.000
Neutral red	0.030
Crystal violet	0.002
Agar	15.000
Final pH ( at 25°C)	7.4±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

1. Surfaces : Loosen cap and remove HiDip™ slide from container taking care not to touch agar surfaces. Check for dehydration or contamination. Gently lower the slides and press agar to touch the test surface by bending the scull around the hinge line. Apply even and firm pressure for 15-20 seconds. Take care not to smudge agar over the test surface. Repeat procedure using the second agar surface on an area adjacent to the initial test side. Return the slide to the container and close tightly. Incubate in an up right position at indicated temperature.
2. Liquids: Loosen cap and remove the HiDip™ slide from container. Check for dehydration or contamination. Dip slide into test fluid for upto 15-20 seconds so that agar surface becomes totally covered. (In case of inadequate liquid sample availability, pour sample over the surface of the slide). Allow to drain. Tab it gently to remove excess fluid from surface. Return the slide to the container and close tightly. Incubate in an upright position at indicated temprature. Label the container for sample number, source, date and time etc. for reference.

### Principle And Interpretation

Plate Count Agar is recommended for the plate count of microorganisms in foods, water and waste water. It is also recommended by APHA, FDA and also by ISO Committee.

VRBA Agar is selective medium used for the detection and enumeration of coliform organisms from water and food products. It is also suggested by ISO Committee for the enumeration of coliforms. It is selective due to presence of the inhibitors-bile salt and crystal violet. Organisms which rapidly ferment lactose produce red colonies surrounded by red-purple halo. Lactose non-fermenters and late lactose fermenters produce pale colonies.

### Type of specimen

Food samples; Water samples

### Specimen Collection and Handling:

Refer Directions.

## Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

### Limitations:

Plate Count Agar

1. This medium is general purpose medium and may not support the growth of fastidious organisms.

Violet Red Bile Agar

1. Further biochemical tests must be carried out for confirmation.

## Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

## Quality Control

### Appearance

The HiDip™ slide containing a combination of sterile PCA and VRBA Medium on separate individual surfaces.

### Colour

#### Colour of Plate Count Agar

Light yellow coloured medium

#### Colour of VRBA medium

Reddish purple coloured medium

### Quantity of medium

2.5 ml of medium per surface

### Sterility Check

Passes release criteria

### pH of Plate Count Agar

pH Range : 6.80- 7.20

### pH of VRBA medium

pH Range :7.20- 7.60

### Cultural Response

Cultural characteristics was observed after incubation at 35-37°C for of 18-24 hours.

Organism	Growth	Colour of colony
<b>PCA Medium</b>		
** <i>Bacillus spizizenii</i> ATCC 6633 (00003*)	luxuriant	Red to Maroon
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	luxuriant	Red to Maroon
<i>Escherichia coli</i> ATCC 25922 (00013*)	luxuriant	Red to Maroon
<i>Lactobacillus casei</i> ATCC 9595	luxuriant	Red to Maroon
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	luxuriant	Red to Maroon
<i>Streptococcus pyogenes</i> ATCC 19615	luxuriant	Red to Maroon
<b>VRBA medium</b>		
# <i>Klebsiella aerogenes</i> ATCC 13048 (00175*)	luxuriant	pink to pinkish red
<i>Escherichia coli</i> ATCC 25922 (00013*)	luxuriant	pinkish red with bile precipitate

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<i>Salmonella</i> Enteritidis ATCC 13076 (00030*)	luxuriant	colourless to orangish yellow
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	inhibited	-

Key : (\*) Corresponding WDCM numbers,

(#) Formerly known as *Enterobacter aerogenes*      \*\*Formerly known as *Bacillus subtilis* subsp. *spizizenii*

### Storage and Shelf Life

Store between 15-30°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

### Disposal

Used HiDip™ slides should be handled carefully, as it contains live microorganisms. These slides can be best disposed off either by or by immersing in a suitable disinfectant solution (i.e. dettol, phenyl etc.) over night or by autoclaving them after loosening the cap.

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#### Disclaimer :

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