

# Product Name : Urea Indole Broth

A liquid medium for the differentiation of organisms, especially the Enterobacteriaceae, on the basis of urease and indole production.

## TYPICAL FORMULA (G/L)

Peptones ..... 10.0  
Sodium Chloride ..... 2.3  
Urea ..... 20.0  
Buffers ..... 4.6  
Phenol Red ..... 0.012  
Final pH = 6.8 ± 0.2 at 25 °C

## DIRECTIONS

Suspend 36.92 G in 1 L of distilled or deionized water. Mix thoroughly to completely dissolve the powder. Sterilize by filtration. Aseptically dispense into sterile tubes.

## DESCRIPTION

Urea Indole Broth is a liquid medium for the differentiation of organisms, especially the Enterobacteriaceae, on the basis of urease and indole production.

## TECHNIQUE

Inoculate the medium using a heavy inoculum (2 loopfuls) of growth from an 18 to 24 hour pure culture. Shake gently to suspend the bacteria. Incubate at 35 ± 2°C for 18 – 24 hours. Observe at 3 – 4 hours for any positive urease in tubes that turn the indicator a deep violet red color (alkalinization), typical of *Proteus* or *Yersinia*. *Klebsiella* and some *Citrobacter* develop positive tubes after 18 hours.

Indole production is determined by adding a few drops of Kovac's Reagent (MB-KV-30). A positive test is indicated by the development of a red color in the reagent layer.

## USER QUALITY CONTROL

### Dehydrated medium

Appearance: homogeneous, inherently lumpy.

Color: light orange to light pink.

### Prepared medium

Appearance: clear.

Color: orange, yellow.

Incubation conditions: 36 ± 1°C / 8-48 hours / aerobiosis.

Microorganism	ATCC	Growth	Urease reaction	Indole reaction
<i>Salmonella typhimurium</i>	14028	good	-	-
<i>Escherichia coli</i>	25922	good	-	+
<i>Proteus vulgaris</i>	13315	good	+	+
<i>Klebsiella pneumoniae</i>	13883	good	+	-
<i>Yersinia enterocolitica</i>	2375	good	+	±

---

## Product Name : Urea Indole Broth

---

### PRECAUTIONS

The medium is heat sensitive. No further sterilisation is necessary or desirable.

### STORAGE

The powder is very hygroscopic: store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-6°C.

### REFERENCES

Roland et al (1947) Ann. Inst. Pasteur 73: 914.

### PACKAGING

Cat. No : MB-U2278 Urea Indole Broth	500 G
---	-------