

**UREA AGAR BASE (CHRISTENSEN AUTOCLAVABLE)****TM 394****INTENDED USE**

For detection of urease producing bacteria.

COMPOSITION

Ingredients	Gms/Ltr
Agar	15.000
Sodium chloride	5.000
Disodium phosphate	1.200
Peptone	1.000
Dextrose (Glucose)	1.000
Monopotassium Phosphate	0.800
Phenol Red	0.012

PRODUCT SUMMARY AND EXPLANATION

Urea Agar Base is recommended for the preparation of Christensen medium for the detection of rapid urease activity of the urease-positive *Proteus*. The urea medium may be used for the detection of urea hydrolysis by some other Enterobacteriaceae that exhibited a delayed urease reaction.

PRINCIPLE

Medium contains Peptone which act as a source of essential nutrients. Dextrose is the energy source. Sodium chloride maintains the osmotic equilibrium of the medium whereas phosphates serve to buffer the medium. Urease- producing organisms hydrolyze the urea to form ammonia and medium changes from orange to pink. Phenol red indicator detects the alkalinity generated by visible colour change from orange to pink. 40% Urea Solution is supplied, as a sterile solution in ampoules, for the convenient preparation of this medium. Medium without urea is used as a negative control.

INSTRUCTIONS FOR USE

1. Dissolve 24gms in 950ml distilled water.
2. Gently heat to boiling with gentle swirling and dissolve the medium completely.
3. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
4. Cool to 50°C.
5. Aseptically add 50 ml of sterile 40% Urea Solution (TS 030).



PRODUCT DATA SHEET

6. Mix well and dispense into sterile tubes, set in the slanting position.

Note: Do Not Overheat or Reheat the medium as urea decomposes very easily.

QUALITY CONTROL SPECIFICATIONS

Appearance Dehydrated powder: Light yellow to light pink colour, free flowing powder.

Appearance of the prepared medium: Yellowish orange colour, clear to slightly opalescent gel.

pH (at 25°C): 6.8± 0.2

INTERPRETATION:

Culture characteristics observed after incubation period of 18 - 48 hours at 35 ± 2°C, w/ added Urea 40% (TS 030).

Organism	ATCC	Inoculum (CFU/ml)	Growth	Urease production
<i>Proteus vulgaris</i>	13315	50-100	Luxuriant	Positive, cerise colour
<i>Klebsiella pneumoniae</i>	13883	50-100	Luxuriant	Positive, cerise colour
<i>Escherichia coli</i>	25922	50-100	Luxuriant	Negative, No change
<i>Salmonella typhimurium</i>	14028	50-100	Luxuriant	Negative, No change
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	Negative, No change

STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

REFERENCES

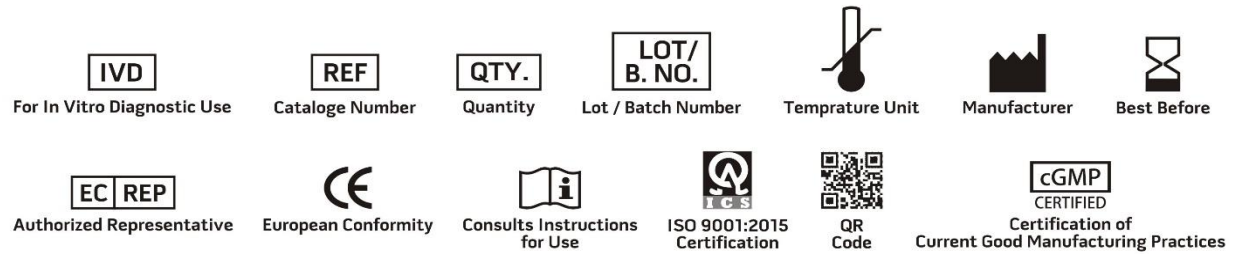
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PRODUCT DATA SHEET



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.