GOSLAR BIOTECH
Your Partner in Sera

Product Data Sheet

UREA AGAR

Product No. GB-DCM-00460-1A

Product Description

Urea Agar is used to detect urease production. Urea Agar described by Christensen detected urease activity by all rapidly urease-positive Proteus organisms and also by other members of Enterobacteriaceae that exhibited a delayed urease reaction. This was accomplished by:

- adding glucose to the medium.
- decreasing the peptone concentration and
- decreasing the buffering system, as a less buffered medium detects even smaller amount of alkali.

Prolonged incubation may cause alkaline reaction in the medium. A medium without urea serves as negative control to rule out false positive results. Also, all urea test media rely on the alkalinity formation and so they are not specific for determining the absolute rate of urease activity. The utilization of proteins may raise the pH to alkalinity due to protein hydrolysis and excess of amino acids liberation results in false positive reaction.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	1.000
Dextrose (Glucose)	1.000
Sodium chloride	5.000
Disodium hydrogen phosphate	1.200
Potassium dihydrogen phosphate	0.800
Phenol red	0.012
Agar	15.000

PRINCIPLE

Peptone is the 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. Urea is hydrolyzed to liberate ammonia. Phenol red indicator detects the alkalinity generated by visible colour change from orange to pink.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder:	Light yellow to light pink homogeneous free flowing powder
Appearance of prepared medium:	Yellowish orange coloured clear to slightly opalescent gel forms in tubes as slants
pH (at 25°C):	6.8±0.2

Goslar Biotech, 255A Barking Road East Ham, London E6 1LB, United Kingdom
Email: info@goslarbiotech.com, Website: www.goslarbiotech.com

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

Precautions and Disclaimer

- Dissolve 24.01 grams in 950 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 10 psi pressure (115°C) for 20 minutes.
- Cool to 45-50°C and aseptically add 50 ml of sterile 40% Urea Solution and mix well.
- Dispense into sterile tubes and allow to set in the slanting position, do not overheat or reheat the medium as urea decomposes very easily.

This product is for research use only.