UREA AGAR BASE

Medium for urease test, recommended by ISO 6785 and IDF 93.

TYPICAL FORMULA	(g/l)
Peptone	1.0
Glucose	1.0
Sodium Chloride	5.0
Monopotassium Phosphate	2.0
Phenol Red	0.012
Agar	15.0
Final pH 6.8 ± 0.2 at 25°C	

DESCRIPTION

UREA AGAR BASE is a medium used for urease test, recommended by ISO 6785 and IDF 93.

PRINCIPLE

Peptone provides nitrogen, carbon, and amino acids required for organism growth. Glucose is an energy source. Sodium chloride maintains the osmotic balance of the medium. Monopotassium phosphate is the buffer. Phenol red is the pH indicator. Agar is the solidifying agent. Urea is added to the medium as substrate for urease enzyme. The splitting of urea by urease causes the release of ammonia, increasing pH of the medium to the alkaline side. This is indicated by a color change of the pH indicator.

PREPARATION

Suspend 24.0 g of powder in 950 ml of distilled or deionized water. Heat until completely dissolved. Autoclave at 121°C for 15 minutes. Cool to 45-50°C. Aseptically add 50 ml of Urea 40% Supplement (ref. 80292). Dispense into sterile tubes and allow to solidify in a slanting position.

TECHNIQUE

Use a heavy inoculum of the growth from a pure 18-24 hours culture. Inoculate by streaking back and forth over the entire slant surface. Do not stab the butt because it serves as color control. Incubate the tubes with the caps loosened at 36 ± 1°C for 6-24 hours. Longer period of incubation may not be necessary.

INTERPRETATION OF RESULTS

The production of urease is a positive reaction, indicated by an intense red or pink color on the slant.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until sings of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. it is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for *in vitro* diagnostic use and must be used by properly trained operators only.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Christensen, W.B. (1946) J. Bact. 52:461-466.
2. Maslen, L.G.C. (1952) Brit. Med. J. 2:545-546.
3. ISO 6785:2001. IDF 93:2001.

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CE IVD

PRODUCT SPECIFICATIONS

NAME
UREA AGAR BASE

PRESENTATION
Dehydrated medium

STORAGE
10-30°C

PACKAGE

Ref.	Content	Packaging
610107	500 g	500 g of powder in plastic bottle
620107	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM
6.8 ± 0.2

USE
UREA AGAR BASE is a medium used for urease test, recommended by ISO 6785 and IDF 93

TECHNIQUE
Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM
Dehydrated medium
Appearance: free-flowing, homogeneous
Colour: orange
Prepared medium
Appearance: slightly opalescent
Colour: reddish-orange

SHELFLIFE
4 years

QUALITY CONTROL
1. Control of general characteristics, label and print

2. Microbiological control
   Inoculum for productivity: 10-100 CFU/ml
   Incubation conditions: 6-24 h at 36 ± 1°C

Microorganism	ATCC®	Urease Production
Proteus vulgaris	13315	+
Escherichia coli	25922	-

TABLE OF SYMBOLS

LOT Batch code	IVD *In vitro* Diagnostic Medical Device	Manufacturer	Use by	Fragile, handle with care
REF Catalogue number	Temperature limitation	Contains sufficient for <n> tests	Consult instructions for use	Keep away from heat sources

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