



Product: Urea 40% Solution

Specification

Steril additive for the ureasa test in microbiology.

Presentation

1 Prepared bottle Bottle 125 ml with: 100 ± 3 ml

Packaging Details

1 box with 1 bottle 125 ml. Injectable cap: Plastic screw inner cap. The use of syringes needles with a diameter greater than 0.8 mm is not recommended.

Shelf Life Storage 24 months 8-14 °C

Composition

Composition (g/l):	
Urea	400
Distilled water	.1000 ml

Description /Technique

Aqueous urea solution 40%, sterilized by filtration and suitable to be used as an additive in culture media. It is supplied to be used with the dehydrated media Urea Agar according to Christensen and Urea Broth. It must be added to these media after the sterilization and with the media cooled to 50-55°C. Once it is added, do not reheat the media because urea is thermolabile and heating allows to its break down and ammonium liberation.

Quality control

Physical/Chemical control

Color : Colourless

Microbiological control

Add supplement to functionality - into medium Urea Agar base

Aerobiosis. Incubation at 37 °C ± 1, reading after 24-48 ± 2h

Microorganism	Growth
Escherichia coli ATCC [®] 25922, WDCM 00013	Urea Negative
Proteus mirabilis ATCC [®] 43071	Urea Postive

Sterility control

Incubation 48 hours at 30-35 °C and 48 hours at 20-25 °C: NO GROWTH. Check at 7 days after incubation in same conditions.

Bibliography

· ATLAS, R.M. & L.C. PARK (1993) Handbook of Microbiological Media. CRC Press Inc. London.

· CHRISTENSEN W.B. (1946) Urea decomposition as means of differentiating Proteus and Paracolon cultures from each other and from Salmonella and Shigella types. J. Bact. 52:461.

· DIN Standard 10160. Untersuchung von Fleisch und Fleischerzeugnissen. Nachweis von Salmonellen. Referenzverfahren.

· DOWNES, F.P. & K. ITO (2001) Compendium of methods for the microbiological examination of foods. 4th ed. APHA. Washington DC. USA.

· EDWARDS & EWING (1962) Identificacion of Enterobacteriaceae Burgess Pub. Co.

· FIL-IDF 93 Standard (2001) Milk and Milk products. Detection of Salmonella.

· ISO 6340 Standard (1995) Water Quality - Detection of Salmonella spp.

· ISO Standard 6579-1 (2017) Microbiology of food chain - Horizontal method for the detection, enumeration and serotyping of

Salmonella - Part 1 : Detection of Salmonella spp.

· ISO 6785 Standard (2001) Milk and Milk products - Detection of Salmonella spp.

· ISO 21567 Standard (2004) Microbiology of food and animal feeding stuffs.- Horizontal method for the detection of Shigella spp.

· MARSHALL, R.T. (1992) Standard methods for the examination of dairy products. 16th ed. APHA. Washington DC. USA.