



Reference: 06-083-100

Scharlau Microbiology - Technical Data

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

24 months

### Storage

8-14 °C

## Composition

Composition (g/l):

Urea ..... 400

Distilled water..... 1000 ml

Filter-sterilized solution to be used as additive in culture media: 01-261 and 02-202 for the urease test.

## 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

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

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

### **Microorganism**

*Escherichia coli* ATCC® 25922, WDCM 00013

*Proteus mirabilis* ATCC® 43071

### **Growth**

Urea Negative

Urea Postive

### Sterility control

Incubation 48 h at 30-35 °C and 48 h at 20-25 °C: NO GROWTH.

Check at 7 days after incubation in same conditions.



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## 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.