

Water Plate Count Agar (NCM0185)

Intended Use

Water Plate Count Agar is a non-selective medium which conforms to ISO 6222:1999, and is not intended for use in the diagnosis of disease or other conditions in humans.

Description

Water Plate Count Agar allows the enumeration of culturable microorganisms, which can be used for the assessment and surveillance of water quality. Colony counts are useful for assessment of ground water integrity and the efficiency of water treatment processes. They also give an indication of the cleanliness and integrity of the distribution system. They can be used to assess the suitability of a water supply for the preparation of food and drink, thus avoiding contamination of the product with spoilage organisms. The main value of colony counts lies in the detection of changes in water supply quality from those expected, based on frequent long-term monitoring. A sudden increase in the numbers can be a warning of pollution and can call for immediate remedial action.

Typical Formulation

Tryptone	6.0 g/L
Yeast Extract	3.0 g/L
Agar	15.0 g/L

Final pH: 7.2 ± 0.2 at 25°C

Formula may be adjusted and/or supplemented as required to meet performance specifications.

Precaution

Refer to SDS

Preparation

1. Suspend 24.0 grams of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.
4. Cool to 45-50°C.

Test Procedure

Pour plate technique or surface inoculation.

Aerobically at 36°C ± 2°C for 44 ± 4 hours and 22°C ± 2°C for 68 ± 4 hours.

Quality Control Specifications

Dehydrated Appearance: Pale straw colored, clear gel.

Minimum QC:

Staphylococcus aureus WDCM 00032

Escherichia coli WDCM 00013

Results

Count all colonies and calculate the number of organisms (or 'colony forming units' cfu) per mL of sample allowing for dilution factors.

Expiration

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing or appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.



Limitations of the Procedures

Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

Storage

Store dehydrated culture media at 2-30°C away from direct sunlight. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

References

1. ISO 6222 (1999) Water quality - Enumeration of culturable microorganisms - Colony count by inoculation in a nutrient agar medium.