

## Maximum Recovery Diluent (Tryptone Salt Broth) (NCM0085)

NCM0085	500G, 5 KG & 10 KG DCM Packs
NCM3500	50 x 9.0mL Universal Tubes
NCM3501	50 x 9.9mL Universal Tubes

### Intended Use

Maximum Recovery Diluent (Tryptone Salt Broth) is used as an isotonic diluent for maximum recovery of microorganisms and is not intended for use in the diagnosis of disease or other conditions in humans.

### Description

An osmotically controlled solution which is an alternative to, and a replacement for, 1/4 strength Ringer's Tablets (NCM0191K). The presence of a low level of peptone lessens the physiological shock normally experienced by bacterial cells when they are introduced to a diluent such as Ringer's Solution. The low level of peptone is such that it does not support the multiplication of organisms within the diluent for up to 45 minutes at 20-25°C. This formula is recommended by ISO 6887-1:2017

### Typical Formulation

Peptone 1.0 g/L  
Sodium Chloride 8.5 g/L  
Final pH: 7.0 ± 0.2 at 25°C

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

### Precaution

Refer to SDS

### Preparation for DCM

1. Dissolve 9.5 grams of the medium in one liter of purified water.
2. Mix thoroughly.
3. Autoclave at 121°C for 15 minutes.

### Test Procedure

- General rules for the preparation of the initial suspension and dilutions – Refer to ISO 6887 Part 1:2017
- Specific rules for the preparation of meat and meat products – Refer to ISO 6887 Part 2:2017
- Specific rules for the preparation of fish and fishery products – Refer to ISO 6887 Part 3:2017
- Specific rules for the preparation of miscellaneous products- Refer to ISO 6887 Part 4:2017
- Specific rules for the preparation of milk and milk products – Refer to ISO 6887 Part 5:2017
- Specific rules for the preparation of samples taken at the primary production stage – Refer to ISO 6887 Part 6:2017

### Quality Control Specifications

**Dehydrated Appearance:** Powder is homogeneous, free flowing and beige.

**Prepared Appearance:** Prepared medium is clear, colorless with no precipitate.

**Expected Cultural Response:** Cultures were held for 45 minutes to 1 hour at 20-25°C , sub-cultured onto recovery media, and viable counts determined.



# Technical Specification Sheet



<u>MICROORGANISM</u>	<u>ATCC</u>	<u>APPROX. INOCULUM (CFU)</u>	<u>EXPECTED GROWTH</u>
<i>Escherichia coli</i>	25922	50-200	± 30% colonies/T0
<i>Escherichia coli</i>	8739	50-200	± 30% colonies/T0
<i>Staphylococcus aureus</i>	25923	50-200	± 30% colonies/T0

The organisms listed are the minimum that should be used for quality control testing.

## **Results**

Refer to appropriate references for test results.

## **Expiration**

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

## **Limitation of the Procedure**

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

## **Storage**

Store dehydrated culture media (NCM0085) 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.

Store prepared tubes (NCM3500 and NCM3501) at 2-30°C away from direct sunlight.

## **References**

1. Straka, R.P. and Stokes, J.L. (1957). Rapid destruction of bacteria in commonly used diluents and its elimination. *Appl. Microbiol.* **5**: 21-25
2. ISO 6887-1:2017 Microbiology of the food chain – Preparation of test samples, initial suspension and decimal dilutions for microbiological examination – Part 1: General rules for the preparation of the initial suspension and dilutions
  - a. ISO 6887 Part 2:2017 Specific rules for the preparation of meat and meat products
  - b. ISO 6887 Part 3:2017 Specific rules for the preparation of fish and fishery products
  - c. ISO 6887 Part 4:2017 Specific rules for the preparation of miscellaneous products
  - d. ISO 6887 Part 5:2017 Specific rules for the preparation of milk and milk products
  - e. ISO 6887 Part 6:2017 Specific rules for the preparation of samples taken at the primary production stage

