Technical Data

# SCDM w/0.5% Soya Lecithin, 4% Tween 20 & 0.6% Sodium thiosulphate

LQ247C

## Intended Use:

Recommended for cultivation of wide variety of microorganisms and for determining efficiency of sanitization of containers, equipment surfaces, water miscible cosmetics etc.

## Composition**

| Ingredients | g / L |
|---|---|
| Tryptone | 17.000 |
| Soya peptone | 3.000 |
| Sodium chloride | 5.000 |
| Glucose monohydrate | 2.500 |
| Dipotassium hydrogen phosphate | 2.500 |
| Soya lecithin | 5.000 |
| Tween 20 (Polysorbate 20) | 40.000 |
| Sodium thiosulphate | 6.000 |
| Final pH ( at 25°C) | 7.3±0.5 |

**Formula adjusted, standardized to suit performance parameters

## Directions

Label the ready to use LQ247C bottle. Inoculate 50-100 cfu sample and Incubate at specified temperature and time.

## Principle And Interpretation

SCDM is recommended as a sterility testing medium in accordance with the harmonized method of USP/EP/BP/JP/IP (1-5). SCDM with 0.5% Soya Lecithin, 4% Tween 20 and 0.6% Sodium thiosulphate is used for the detection of microorganisms on surfaces of sanitary importance.

Tryptone and soya peptone makes this medium nutritious by providing nitrogeneous and carbonaceous compounds, long chain peptides, vitamins and other essential nutrients for the growth of microorganisms. Natural sugars in soybean promote growth of fastidious organism. Sodium chloride maintains osmotic balance. Lecithin and Tween 20 are neutralizers reported to inactivate residual disinfectants from where the sample is collected (6). Lecithin neutralizes quaternary ammonium compounds and Tween 20 neutralizes preservatives in the cosmetics or pharmaceutical products, allowing bacteria to grow. Sodium thiosulphate neutralizes mercurial, halogens, aldehydes etc.

## Type of specimen

Swabs of containers, Equipment surfaces, Water miscible cosmetics etc.

## Specimen Collection and Handling:

For swabs of containers, equipment surfaces, water miscible cosmetics samples follow appropriate techniques for handling specimens as per established guidelines (1-5).

After use, contaminated materials must be sterilized by autoclaving before discarding.

## Warning and Precautions :

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

## Warning and Precautions :

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
3. Further serological and biochemical testing is required for complete identification.

## Performance and Evaluation:

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature

## Quality Control

**Appearance**

Sterile SCDM w/0.5% Soya Lecithin, 4 %Tween 20 & 0.6 % Sodium thiosulphate in glass bottle

**Colour**

Light yellow to amber coloured slightly opalascent solution.

**Quantity of Medium**

100 ml of medium in glass bottle.

**Sterility Check**

Passes release criteria

**pH**

6.80 -7.80

**Cultural response**

Cultural characteristics observed after an incubation as specified.

**Growth promoting properties**

Clearly visible growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at the specified temperature for not more than the shortest period of time specified inoculating <=100 cfu at 30-35°C for 18-24 hours for bacteria and <=5 days for fungal.

| Organism | Inoculum (CFU) | Growth | Incubation temperature | Incubation period |
|---|---|---|---|---|
| **Growth promoting** | | | | |
| *Escherichia coli* ATCC 25922(00013*) | 50 -100 | luxuriant | 30 -35 °C | 18 -24 hrs |
| *Escherichia coli* ATCC 8739 (00012*) | 50 -100 | luxuriant | 30 -35 °C | 18 -24 hrs |
| *Staphylococcus aureus* subsp. *aureus* ATCC 6538 (00032*) | 50 -100 | luxuriant | 30 -35 °C | 18 -24 hrs |
| *Staphylococcus aureus* subsp. *aureus* ATCC 25923 (00034*) | 50 -100 | luxuriant | 30 -35 °C | 18 -24 hrs |
| ^*Pseudomonas paraeruginosa* ATCC 9027 (00026*) | 50 -100 | luxuriant | 30 -35 °C | 18 -24 hrs |
| *Pseudomonas aeruginosa* ATCC 27853 (00025*) | 50 -100 | luxuriant | 30 -35 °C | 18 -24 hrs |
| ****Bacillus spizizenii* ATCC 6633 (00003*) | 50 -100 | luxuriant | 30 -35 °C | 18 -24 h |
| *Salmonella* Typhimurium ATCC 14028 (00031*) | 50 -100 | luxuriant | 30 -35 °C | 18 -24 hrs |
| *Salmonella* Abony NCTC 6017 | 50 -100 | luxuriant | 30 -35 °C | 18 -24 hrs |
| *$Kocuria rhizophila* ATCC 9341 | 50 -100 | luxuriant | 30 -35 °C | 18 -24 hrs |
| *Candida albicans* ATCC 10231 (00054*) | 50 -100 | luxuriant | 30 -35 °C | <=5 d |
| *Candida albicans* ATCC 2091 (00055*) | 50 -100 | luxuriant | 30 -35 °C | <=5 d |
| *#Aspergillus brasiliensis* ATCC 16404 (00053*) | 50 -100 | luxuriant | 30 -35 °C | <=5 d |

Key : (*) Corresponding WDCM numbers,

^ Formerly known as *Pseudomonas aeruginosa*

** Formerly known as *Bacillus subtilis* subsp. *spizizenii*

# Formerly known as *Aspergillus niger*

$ Formerly known as *Micrococcus luteus*

## Storage and Shelf Life

Store between 15-30°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

## Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (7,8).

## Reference

1. The United States Pharmacopoeia-National Formulatory (USP-NF), 2022.
2. European Pharmacopoeia, 2022, 10 th volume, European Directorate for the quality of medicines & Healthcare.
3. The British Pharmacopoeia, 2022, Medicines and Healthcare products Regulatory Agency.
4. The Japanese Pharmacopoeia, 17th edition, 2016, The Ministry of Health, Labour and welfare.
5. Indian Pharmacopoeia, 2022, Indian Pharmacopoeia Commission, Ministry of Health and Family Welfare Government of India.
6. Brummer, 1976, Appl. Environ. Microbiol., 32:80.
7. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
8. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

Revision : 03/2024

Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory,diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.