# SCCRAM BROTH (6910)

## Intended Use

**SCCRAM Broth** is a non-selective culture medium used for the rapid enrichment of *Salmonella* spp. with the ISO-GRID and/or NEO-GRID Membrane Filtration System.

## Product Summary and Explanation

SCCRAM Broth was developed for the primary non-selective enrichment of *Salmonella* spp. from food samples. This medium was designed to stimulate sufficient repair and multiplication of *Salmonella* spp. within 6 - 8 hours of incubation at 42°C. The SCCRAM Broth formulation is used to enable direct presumptive detection of *Salmonella* in a total incubation period of 24 hours using EF-18 Agar and the ISO-GRID and/or NEO-GRID Membrane Filtration System.

## Principles of the Procedure

Special Peptone is the nitrogen and vitamin source in SCCRAM Broth. Sodium Pyruvate is the carbohydrate source, and enhances recovery of injured *Salmonella* spp. Sodium Chloride maintains the osmotic balance of the medium. MOPS (free acid), MOPS (sodium salt), are buffering agents.

## Formula / Liter

Special Peptone..... 10 g
Sodium Pyruvate ..... 5 g
Sodium Chloride ..... 5 g
MOPS, free acid ..... 10.5 g
MOPS, sodium salt ..... 11.6 g
Final pH: 7.1 ± 0.2 at 25°C
Formula may be adjusted and/or supplemented as required to meet performance specifications.

## Precautions

1. For Laboratory Use.
2. Irritant. Irritating to eyes, respiratory system, and skin.

## Directions

1. Suspend 42.1 g of the medium in one liter of purified water.
2. If desired, add 10 g of Tween 80.
3. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
4. Autoclave at 121°C for 15 minutes.

## Quality Control Specifications

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

**Prepared Appearance:** Prepared medium is clear to slightly hazy, light to medium amber, and none to very slight fine precipitate.

**Expected Cultural Response:** Cultural response in SCCRAM Broth incubated at 42°C for 6 hours. After incubation in SCCRAM Broth, quality control organisms were processed using the ISO-GRID and/or NEO-GRID Filtration System. Filters were placed on EF-18 Agar and incubated at 42 ± 0.5°C for 18 - 24 hours.

| Microorganism | Response |
|---|---|
| *Salmonella cholerasuis* ATCC 13076 | good to excellent growth |
| *Salmonella typhimurium* ATCC 14028 | good to excellent growth |

## Test Procedure, ISO-GRID

1. Weigh a 25 g sample of food and homogenize in 225 mL of warm (42°C) SCCRAM Broth.
2. Incubate for 6 - 7 hours at 42°C.
3. Filter 1 mL of enrichment through an ISO-GRID / NEO-GRID Membrane Filter and place on EF-18 Agar.
4. Incubate for 18 - 24 hours at 42°C.
5. Examine the filter for presumptive positive viable *Salmonella* spp. colonies.

## Results

Presumptive positive *Salmonella* spp. appear green, blue-green, or blue on EF-18 Agar. Further identification is required through biochemical and serological procedures.

If positive colonies are present, count the number of squares containing presumptive *Salmonella* spp. Convert the number of squares to the corresponding MPN and calculate the presumptive *Salmonella* spp. MPN, using the methods described in the ISO-GRID Methods Manual.

## Storage

Store sealed bottle containing the dehydrated medium at 2 - 30°C. 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.

## 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 grow poorly or fail to grow on this medium.

## Packaging

| | | | |
|---|---|---|---|
| **SCCRAM Broth** | **Code No.** | **6910A** | **500 g** |

## Technical Information

Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (517)372-9200 or fax us at (517)372-2006.

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