

## CM 21,204 - MINIMUM SALTS W/ CASEIN ACID HYDROLYSATE

### INTENDED USE

For cultivation of *Escherichia coli* strains used for genetic and molecular studies.

### PRODUCT SUMMARY AND EXPLANATION

Minimum Salt with Casein Acid Hydrolysate is prepared based on the formula originally suggested by Davis et al. The medium with the addition of casein acid hydrolysate is used for cultivating *Escherichia coli* strains used for genetic and molecular studies.

### COMPOSITION

| Ingredients                      | Gms / Ltr |
|----------------------------------|-----------|
| Casein acid hydrolysate          | 4.000     |
| Disodium hydrogen phosphate      | 6.800     |
| Monopotassium hydrogen phosphate | 3.000     |
| Sodium chloride                  | 0.500     |
| Ammonium chloride                | 1.000     |
| Dextrose                         | 4.000     |
| Magnesium sulphate               | 0.240     |

### PRINCIPLE

The medium consists of Casein acid hydrolysate which supplies many amino acids (except tryptophan) to *E. coli*. Ammonium chloride is added as a nitrogen source. Dextrose serves as the carbon and energy source while the two phosphates buffer the medium against pH changes due to the utilization of carbohydrate. Magnesium ions are required in a variety of enzymatic reactions including DNA replication.

### INSTRUCTION FOR USE

- Dissolve 19.54 grams in 1000 ml purified/distilled water.
- Heat, if necessary, to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

### QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder : Cream to yellow homogeneous free flowing powder.
- Appearance of prepared medium : Light amber coloured clear to slightly opalescent solution.
- pH (at 25°C) : 6.8±0.2

### INTERPRETATION

Cultural characteristics observe after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Incubation Temperature | Incubation Period |
|---------------|------|-------------------|--------|------------------------|-------------------|
|---------------|------|-------------------|--------|------------------------|-------------------|



|                           |       |        |           |         |             |
|---------------------------|-------|--------|-----------|---------|-------------|
| Escherichia coli strain B | 23226 | 50-100 | Luxuriant | 35-37°C | 18-24 Hours |
|---------------------------|-------|--------|-----------|---------|-------------|

#### PACKAGING:

In pack size of 500 gm bottles.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

#### REFERENCES

1. Davis L.G., Dibner M. D. and Battey J. F., 1986, Basic Methods in Molecular Biology, Elsevier, New York.
2. Sambrook J., Fritsch E. F. and Maniatis T., 1989, Molecular Cloning: A Laboratory Manual, 2nd Ed., Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y.

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|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <br>Good Manufacturing<br>Practices Certified | <br>For In Vitro Diagnostic Use                                                                            | <br>Quantity            | <br>Lot / Batch Number | <br>Catalogue Number                 | <br>Manufacturer |
| <br>Temperature Unit                          | <br>Authorized Representative<br><small>MedWet GmbH<br/>Buckhorn 10,<br/>40142 Düsseldorf, Germany</small> | <br>European Conformity | <br>QR Code            | <br>Consults Instructions<br>for Use | <br>Best Before  |

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

\*For Lab Use Only

