

### Technical Information

#### TNM-FH Insect Medium

With Lactalbumin hydrolysate , Yeast extract and Sodium bicarbonate  
Without L-Glutamine

#### Product Code: IML1008

**Application:-** TNM-FH medium is a modification of Grace's insect medium. The modification was developed by Dr. W. F. Hink to grow Cabbage looper cell line TN-368. Presently, this medium is used to grow cells derived from a variety of lepidopterans species. IML1008, TNM-FH insect medium is Grace's insect medium supplemented with lactalbumin hydrolysate and yeast extract. It does not contain L-glutamine. Lactalbumin hydrolysate provides a large number of free amino acids. Yeast extract serves as a source of vitamins. Supplemented with 5-20% fetal bovine serum this medium supports growth of number of insect cell lines derived from Lepidopteran species. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

#### Composition\*\*

Ingredients	mg/Litre
<b>INORGANIC SALTS</b>	
Calcium chloride dehydrate	1324.620
Magnesium chloride anhydrous	1068.200
Magnesium sulphate anhydrous	1357.660
Potassium chloride	2240.000
Sodium bicarbonate	350.000
Sodium dihydrogen phosphate anhydrous	876.920
<b>AMINO ACIDS</b>	
DL-Serine	1100.000
Glycine	650.000
L-Alanine	225.000
L-Arginine hydrochloride	700.000
L-Asparagine monohydrate	350.000
L-Aspartic acid	350.000
L-Cystine dihydrochloride	25.000
L-Glutamic acid	600.000
L-Histidine hydrochloride monohydrate	3377.640
L-Isoleucine	50.000
L-Leucine	75.000
L-Lysine hydrochloride	625.000
L-Methionine	50.000
L-Phenylalanine	150.000
L-Proline	350.000
L-Threonine	175.000
L-Tryptophan	100.000
L-Tyrosine disodium salt dihydrate	72.000
L-Valine	100.000
β-Alanine	200.000

### VITAMINS

Choline chloride	0.200
D-Biotin	0.010
D-Calcium-Pantothenate	0.020
Folic acid	0.020
Niacin	0.020
Pyridoxine hydrochloride	0.020
Riboflavin	0.020
Thiamine hydrochloride	0.020
myo-Inositol	0.020
p-Amino benzoic acid (PABA)	0.020

### OTHERS

Alpha-Ketoglutaric acid	370.000
D(+) Glucose	700.000
D-Fructose	400.000
Fumaric acid	55.000
L-Malic acid	670.000
Lactalbumin hydrolysate	3330.000
Succinic acid	60.000
Sucrose	26680.000
Yeast extract	3330.000

## Methodology

1. Add 20.55ml of 200mM L-glutamine (TCL1012) for 1 litre of medium.

## Material required but not provided

L-Glutamine solution 200mM (TCL1012)  
Fetal Bovine Serum (BA3112/ BA12432)

## Quality control

### Appearance

Yellow to pale yellow colored clear solution

### pH

5.90 -6.50

### Osmolality in mOsm/Kg H<sub>2</sub>O

340.00 -380.00

### Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

### Cultural Response

The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts and comparing it with a control medium through three subcultures.

### Endotoxin Content

NMT 15EU/ml

## Storage and Shelf Life

- Store at 2-8°C away from bright light.
- Shelf life is 18 months.
- Use before expiry date given on the product label.

### Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House 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 diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- 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.
- Do not use the products if it fails to meet specifications for identity and performance parameters.