



Technical Datasheet

Schneider's Insect Medium

With Calcium chloride and Sodium bicarbonate Without L-Glutamine

Product Code: IML003

Product Description:

Schneider's insect medium has been specially formulated for the in vitro culture of *Drosophila melanogaster* cells and tissues. A number of cell lines derived from *Drosophila melanogaster* are now available and are extensively used in genetic and molecular biology research. *Drosophila* cells are also used to study recombinant protein expression.

IML003 is Schneider's insect medium with calcium chloride and sodium bicarbonate. It does not contain L-glutamine. The basal medium also needs to be supplemented with 5-20% of heat inactivated fetal bovine serum to supply the necessary growth factors to the insect cells. Schneider's insect medium is an extremely nutritious medium and supports rapid growth of cells derived from *Drosophila*. It can also be used to culture cell lines derived from other dipteran 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/L
INORGANIC SALTS	
Calcium chloride dihydrate	794.000
Disodium hydrogen phosphate	700.000
Magnesium sulphate anhydrous	1807.000
Potassium chloride	1600.000
Potassium dihydrogen phosphate	450.000
Sodium bicarbonate	400.000
Sodium chloride	2100.000
AMINO ACIDS	
Glycine	250.000
L-Arginine hydrochloride	483.810
L-Aspartic acid	400.000
L-Cysteine hydrochloride monohydrate	78.000
L-Cystine dihydrochloride	100.000
L-Glutamic acid	800.000

L-Histidine hydrochloride monohydrate	540.000
L-Isoleucine	150.000
L-Leucine	150.000
L-Lysine hydrochloride	1650.000
L-Methionine	800.000
L-Phenylalanine	150.000
L-Proline	1700.000
L-Serine	250.000
L-Threonine	350.000
L-Tryptophan	100.000
L-Tyrosine disodium salt dihydrate	620.000
L-Valine	300.000
ß-Alanine	500.000
OTHERS	
Alpha-Ketoglutaric acid	200.000
D(+) Glucose	2000.000
D(+)-Trehalose	2000.000
Fumaric acid	100.000
L-Malic acid	100.000
Succinic acid	100.000
Yeast extract	2000.000

Directions:

1. Add $61.64 \, \text{ml}$ of 200 mM L-glutamine (TCL012) for 1 litre of medium.

Material required but not provided:

L-Glutamine solution 200mM (TCL012) Fetal bovine serum (RM1112/ RM10432)

Quality Control:

Appearance

Yellow to pale yellow colored clear solution

pН

6.40 - 7.00

Osmolality in mOsm/Kg H₂O

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 minimum 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: Revision: 02/2022

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