



Product Information

Schneider's Insect Medium

Schneider's Insect medium was developed and later modified by Dr. Schneider to support the growth and development of excised imaginal disks from the fruitfly, *Drosophila melanogaster*. The medium was later used to establish cell lines from *Drosophila* embryos. When supplemented with 5-20% heat-inactivated fetal bovine serum, Schneider's medium has been found to support the rapid growth of both primary and established cultures of cells derived from *Drosophila* spp. and several other dipterans.

COMPONENT	S 9895 g/L	S 0146 [1X] g/L
INORGANIC SALTS		
Calcium Chloride (anhydrous)	—	0.6
Magnesium Sulfate	1.807221	1.807221
Potassium Chloride	1.6	1.6
Potassium Phosphate Monobasic	0.45	0.45
Sodium Bicarbonate	—	0.4
Sodium Chloride	2.1	2.1
Sodium Phosphate Dibasic	0.7	0.7
AMINO ACIDS		
β-Alanine	0.5	0.5
L-Arginine	0.6	0.6
L-Aspartic Acid	0.4	0.4
L-Cystine • 2HCl	0.026732	0.026732
L-Cysteine	0.06	0.06
L-Glutamic Acid	0.8	0.8
L-Glutamine	1.8	1.8
Glycine	0.25	0.25
L-Histidine	0.4	0.4
L-Isoleucine	0.15	0.15
L-Leucine	0.15	0.15
L-Lysine	1.65	1.65
L-Methionine	0.15	0.15
L-Proline	1.7	1.7
L-Serine	0.25	0.25
L-Threonine	0.35	0.35
L-Tryptophan	0.1	0.1
L-Tyrosine • 2Na • 2H ₂ O	0.720199	0.720199
L-Valine	0.3	0.3

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OTHER

Fumaric Acid	0.06	0.06
D(+)-Glucose	2.0	2.0
α -Ketoglutaric Acid	0.35	0.35
L(-)Malic Acid	0.6	0.6
Succinic Acid	0.06	0.06
D(+)-Trehalose	2.0	2.0
Yeast Extract	2.0	2.0

ADD

Calcium Chloride (anhydrous)	0.6	—
Sodium Bicarbonate	0.4	—

SPECIFICATIONS

pH at RT (without sodium bicarbonate)	6.1 \pm 0.3	N/A
pH at RT (with sodium bicarbonate)	6.9 \pm 0.3	6.5 \pm 0.3
Osmolality — mOsm/Kg H ₂ O (without sodium bicarbonate)	290 \pm 5%	N/A
Osmolality — mOsm/Kg H ₂ O (with sodium bicarbonate)	360 \pm 5%	350 \pm 5%
Grams of powder required to prepare 1 L	24.1	N/A

REFERENCE

1. Schneider, I. and A. Blumenthal. (1978). *Drosophila Cell and Tissue Culture*. In: *Biology and Genetics of Drosophila* vol. 2A, M. Ashburner and T.R.F. Wright eds., Academic Press, N.Y., pp. 266-315.