

# Product Data Sheet

## Serum-Free DMEM/F12 Culture Medium, 500 ml

Catalog Number: 0410

### Product Description

DMEM/F12 SFM is a serum-free medium for the general cultivation of mammalian cell lines. The formulation is a 1:1 blend of DMEM and Ham's F12 media. It is supplied as a complete ready-to-use medium with L-glutamine, Hepes buffer, bovine pituitary extract and epidermal growth factor. The medium is prepared without phenol red or antibiotics.

### Product Specifications

Appearance	Clear, light pink
pH	7.2-7.5
Conductivity	10-16 mS/cm
Bioburden	Sterile
Packaging	500 ml
Storage, long-term	-80°C, 2 years from date of manufacture
Storage, short-term	4°C, 1 month

### Formulation

Inorganic Salts	mg/L	Amino Acids	mg/L
(NH <sub>4</sub> ) <sub>2</sub> MO <sub>4</sub> 4H <sub>2</sub> O	—	L-Alanine	4.45
NH <sub>4</sub> BO <sub>3</sub>	—	L-Arginine HCl	14.75
CaCl <sub>2</sub> anhydrous	116.6	L-Asparagine H <sub>2</sub> O	7.50
CuSO <sub>4</sub> •5H <sub>2</sub> O	0.0013	L-Aspartic Acid	6.65
Fe(NO <sub>3</sub> ) <sub>3</sub> 9H <sub>2</sub> O	0.05	L-Cystine 2HCl	17.56
FeSO <sub>4</sub> 7H <sub>2</sub> O	0.417	L-Cysteine HCl H <sub>2</sub> O	31.29
MgCl <sub>2</sub> 6H <sub>2</sub> O	61.2	L-Glutamic Acid	7.35
MgSO <sub>4</sub>	48.84	L-Glutamine	365
MnSO <sub>4</sub>	—	Glycine	18.75
NiCl <sub>2</sub>	—	L-Histidine HCl H <sub>2</sub> O	31.48
KCl	311.8	L-Isoleucine	5447
NaHCO <sub>3</sub>	—	L-Leucine	59.05
NaCl	6,996	L-Lysine HCl	91.25
NaSiO <sub>3</sub> 9H <sub>2</sub> O	—	L-Methionine	17.24
Na <sub>2</sub> SeO <sub>3</sub>	—	L-Phenylalanine	35.48
Na <sub>2</sub> HPO <sub>4</sub> , anhydrous	71.02	L-Proline	17.25
NaH <sub>2</sub> PO <sub>4</sub> , anhydrous	54.3	L-Serine	26.25
SnCl <sub>2</sub> 7H <sub>2</sub> O	—	L-Threonine	53.45
ZnSO <sub>4</sub> 7H <sub>2</sub> O	0.432	L-Tryptophan	9.02
		L-Tyrosine 2Na 2H <sub>2</sub> O	55.79
		L-Valine	52.85

### Growth Factors:

Bovine Pituitary Extract	40.00
Epidermal Growth Factor	0.005



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Vitamins	mg/L
D-Biotin	0.0035
Choline Chloride	8.98
Folic Acid	2.66
myo-Inositol	12.60
Niacinamide	2.02
D-Pantothenic Acid	2.02
Pyridoxal HCl	2.00
Pyridoxine HCl	0.0031
Riboflavin	0.219
Thiamine HCl	2.17
Vitamin B12	0.68
<b>Other</b>	
D-Glucose	3,150
HEPES	3,575
Hypoxanthine	2.39
Linoleic Acid	0.042
Phenol Red	-
Putrescine	0.081
Pyruvic Acid	55.00
DL-Thioctic Acid	0.105
Thymidine	0.365
NaHCO <sub>3</sub> 1.2	1,200