

# Product Data Sheet

## Serum-Free Iscove's Modified Dulbecco's Medium

Catalog Number: 0411

### Product Description

IMDM is a serum-free medium formulation for general use. The medium is derived from DMEM containing selenium along with additional amino acids and other components. The SFM is supplied complete, ready to use with L-glutamine, Hepes, BPE and EGF for culturing a wide range of cell types. SFM-IMDM does not contain phenol red or antibiotics.

### Formulation

Components	Mol. Weight	mg/L	mM
<b>Amino Acids</b>			
L-Alanine	89.09	25	0.281
L-Arginine*HCl	210.7	84	0.399
L-Asparagine*H <sub>2</sub> O	150.14	28.4	0.189
L-Aspartic Acid	133.1	30	0.225
L-Cystine	240.31	70.1	0.292
L-Glutamic Acid	147.1	75	0.510
L-Glutamine	146.15	584	3.996
Glycine	75.07	30	0.400
L-Histidine	155.16	31.09	0.200
L-Isoleucine	131.17	105	0.800
L-Leucine	131.2	105	0.800
L-Lysine*HCl	182.65	146	0.799
L-Methionine	149.2	30	0.201
L-Phenylalanine	165.19	66	0.400
L-Proline	115.13	40	0.347
L-Serine	105.09	42	0.400
L-Threonine	119.1	95	0.798
L-Tryptophan	204.2	16	0.078
L-Tyrosine	181.19	83.75	0.462
L-Valine	117.1	94	0.803
<b>Other Components</b>			
D-Glucose	180.16	4500	24.978
Hepes	238.3	5958	25.002
Phenol Red	354.4	14.1	0.040
Sodium Pyruvate	110.04	110	1.000



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### Product Specifications

Unit Size	500 mL
Shipping	This product is shipped frozen.
Storage	Store at < -20°C
Stability	2 years at < -20°C; 3 months at 4°C
pH	7.1 - 7.4
Osmolality	280 - 300 mOsM

Components	Mol. Weight	mg/L	mM
<b>Vitamins</b>			
D-Biotin	244.3	0.013	0.000
Choline Chloride	139.6	4	0.029
Folic Acid	441.4	4	0.009
I-Inositol	180.16	7.2	0.040
Niacinamide	122.1	4	0.033
D-Pantothenic Acid	238.3	2	0.008
Pyridoxal*HCl	204	4	0.020
Riboflavin	376.4	0.4	0.001
Thiamine HCl	337.3	4	0.012
Vitamin B-12	1355.4	0.013	9.59E-06
<b>Inorganic Salts</b>			
CaCl <sub>2</sub> *2H <sub>2</sub> O	147	218.51	1.486
MgSO <sub>4</sub>	120.4	97.7	0.811
KCl	74.55	330	4.427
KNO <sub>3</sub>	101.1	0.076	0.001
NaHCO <sub>3</sub>	84.01	3024	35.996
NaCl	58.44	4500	77.002
NaH <sub>2</sub> PO <sub>4</sub>	138	125	0.906
Na <sub>2</sub> SeO <sub>3</sub>	173	0.0173	1.00E-04
<b>Other Components</b>			
Bovine Pituitary Extract		40	NA
Epidermal Growth Factor	6200	0.005	8.06E-07

### Material Safety Data

FOR RESEARCH USE ONLY. NOT INTENDED OR APPROVED FOR HUMAN, DIAGNOSTICS OR VETERINARY USE. Do not ingest, swallow or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. For complete safety information see full Material Safety Data Sheet.