

DATA SHEET

Rev.ver: 01

1. Identification

Product name	Nutrient Mixture F-12 Ham w/ L-Glutamine and 1.176gms per litre Sodium bicarbonate
Catalog No	CCML102

2. Description

Ham's Nutrient Mixtures were originally formulated to support single-cell plating of near-diploid Chinese Hamster Ovary (CHO) cells and mouse L-cells. Among these, Ham's Nutrient Mixture F-12 was specifically developed for the serial propagation and cloning of two CHO cell lines—CHD-3 and CHL-1—as well as mouse L-cells. This medium is widely preferred for the cultivation of rodent-derived cells, cloning of myeloma and hybridoma cells, and conducting clonal toxicity assays using CHO cells.

3. Product Specifications

Appearance	Light orange colored, clear solution
CO ₂ concentration, optimum	5.0 %
Storage and shelf life	Store at +2°C to +8°C protected from light. Once opened, store at 4°C and use within 6-8 weeks.
Shipping conditions	Ambient

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4. Formulation

Components	Concentration mg/L
Amino Acids:	
L-Alanine	8.910
L-Arginine HCl	210.700
L-Asparagine monohydrate	15.010
L-Aspartic acid	13.300
L-Cysteine HCl	35.120
L-Glutamic Acid	14.700
L-Glutamine	146.000
Glycine	7.500
L-Histidine HCl H ₂ O	20.960
L-Isoleucine	3.940
L-Leucine	13.100
L-Lysine HCl	36.500
L-Methionine	4.480
L-Phenylalanine	4.960
L-Proline	34.500
L-Serine	10.500
L-Threonine	11.900
L-Tryptophan	2.040
L-Tyrosine 2Na 2H ₂ O	7.810
L-Valine	11.700
Vitamins:	
Choline chloride	13.960
Biotin	0.0073
D-Calcium Pantothenate	0.480
Folic Acid	1.320
Nicotinamide	0.037

Components	Concentration mg/L
Riboflavin	0.038
Pyridoxal HCl	0.062
i-Inositol	18.000
Thiamine HCl	0.340
Vitamin B12	1.360
Inorganic Salts	
CaCl ₂ 2H ₂ O	44.10
Copper Sulphate pentahydrate	0.0025
Fe(NO ₃) ₃ .9H ₂ O	0.834
KCl	223.60
MgSO ₄	57.65
Sodium chloride	7599.000
Sodium Bicarbonate	1176.00
NaHPO ₄ 2H ₂ O	109
Sodium phosphate dibasic anhydrous	142.040
Zinc sulphate heptahydrate	0.863
Other Components:	
D-Glucose	1801.600
Phenol Red Sodium Salt	1.240
Sodium Pyruvate	110.10
Hypoxanthine sodium salt	4.770
Linoleic acid	0.084
Lipoic acid	0.210
Putrescine dihydrochloride	0.161
Thymidine	0.730

5. Precautions and Disclaimer

This product is for research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.