

Nutrient Mixtures (Ham) F-12

| | N3520 | N4388 | N4888 | N6658 | N6760 | N8641 |
|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Component | [Powder] | [Powder] | [Liquid] | [Liquid] | [Powder] | [Liquid] |
| | g/L | g/L | g/L | g/L | g/L | g/L |
| Inorganic salts | | | | | | |
| CaCl ₂ • 2H ₂ O | — | — | 0.0441 | 0.0441 | — | 0.0441 |
| CaCl ₂ (anhyd) | 0.1021 | 0.0333 | — | — | 0.0333 | — |
| CuSO ₄ • 5H ₂ O | 0.0000025 | 0.0000025 | 0.0000025 | 0.0000025 | 0.0000025 | 0.0000025 |
| FeSO ₄ • 7H ₂ O | 0.000834 | 0.000834 | 0.000834 | 0.000834 | 0.000834 | 0.000834 |
| MgCl ₂ • 6H ₂ O | — | — | — | 0.123 | — | — |
| MgCl ₂ (anhyd) | 0.0495092 | 0.0576 | 0.0576 | — | 0.0576 | 0.0576 |
| MgSO ₄ (anhyd) | 0.19264 | — | — | — | — | — |
| KCl | 0.28329 | 0.224 | 0.224 | 0.224 | 0.224 | 0.224 |
| KH ₂ PO ₄ | 0.058523 | — | — | — | — | — |
| NaHCO ₃ | — | — | 1.176 | 1.176 | — | 1.176 |
| NaCl | 7.5972 | 7.1 | 7.599 | 7.599 | 7.599 | 7.1 |
| Na ₂ HPO ₄ | 0.11502 | 0.14204 | 0.14204 | 0.14204 | 0.14204 | 0.14204 |
| ZnSO ₄ • 7H ₂ O | 0.0001438 | 0.000863 | 0.000863 | 0.000863 | 0.000863 | 0.000863 |
| Amino acids | | | | | | |
| L-Alanine | 0.017818 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| L-Arginine • HCl | 0.4214 | 0.211 | 0.211 | 0.211 | 0.211 | 0.211 |
| L-Asparagine monohydrate | 0.03002 | 0.01501 | 0.01501 | 0.01501 | 0.01501 | 0.01501 |
| L-Aspartic acid | 0.02662 | 0.0133 | 0.0133 | 0.0133 | 0.0133 | 0.0133 |
| L-Cysteine • HCl • monohydrate | 0.07024 | 0.035 | 0.035 | 0.035 | 0.035 | 0.035 |
| L-Glutamic acid | 0.02942 | 0.0147 | 0.0147 | 0.0147 | 0.0147 | 0.0147 |
| L-Glutamine | 0.2922 | 0.146 | — | 0.146 | 0.146 | — |
| Glycine | 0.015014 | 0.00751 | 0.00751 | 0.00751 | 0.00751 | 0.00751 |
| L-Histidine • HCl • monohydrate | 0.04192 | 0.02096 | 0.02096 | 0.02096 | 0.02096 | 0.02096 |
| L-Isoleucine | 0.007872 | 0.00394 | 0.00394 | 0.00394 | 0.00394 | 0.00394 |
| L-Leucine | 0.02624 | 0.0131 | 0.0131 | 0.0131 | 0.0131 | 0.0131 |
| L-Lysine • HCl | 0.07304 | 0.0365 | 0.0365 | 0.0365 | 0.0365 | 0.0365 |
| L-Methionine | 0.008952 | 0.00448 | 0.00448 | 0.00448 | 0.00448 | 0.00448 |
| L-Phenylalanine | 0.009912 | 0.00496 | 0.00496 | 0.00496 | 0.00496 | 0.00496 |
| L-Proline | 0.06906 | 0.0345 | 0.0345 | 0.0345 | 0.0345 | 0.0345 |
| L-Serine | 0.02102 | 0.0105 | 0.0105 | 0.0105 | 0.0105 | 0.0105 |
| L-Threonine | 0.02382 | 0.0119 | 0.0119 | 0.0119 | 0.0119 | 0.0119 |
| L-Tryptophan | 0.004084 | 0.00204 | 0.00204 | 0.00204 | 0.00204 | 0.00204 |
| L-Tyrosine • 2Na • dihydrate | 0.010872 | 0.00778 | 0.00778 | 0.00778 | 0.00778 | 0.00778 |
| L-Valine | 0.02342 | 0.0117 | 0.0117 | 0.0117 | 0.0117 | 0.0117 |
| Vitamins | | | | | | |
| D-Biotin | 0.000073 | 0.0000073 | 0.0000073 | 0.0000073 | 0.0000073 | 0.0000073 |
| Choline chloride | 0.01396 | 0.01396 | 0.01396 | 0.01396 | 0.01396 | 0.01396 |
| Folic acid | 0.0013242 | 0.00132 | 0.00132 | 0.00132 | 0.00132 | 0.00132 |
| myo-Inositol | 0.01802 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 |
| Niacinamide | 0.0000366 | 0.000037 | 0.000037 | 0.000037 | 0.000037 | 0.000037 |
| D-Pantothenic acid • ½Ca | 0.000477 | 0.00048 | 0.00048 | 0.00048 | 0.00048 | 0.000238 |
| Pyridoxine • HCl | 0.0000617 | 0.000062 | 0.000062 | 0.000062 | 0.000062 | 0.000062 |
| Riboflavin | 0.0000376 | 0.000038 | 0.000038 | 0.000038 | 0.000038 | 0.000038 |
| Thiamine • HCl | 0.0003373 | 0.00034 | 0.00034 | 0.00034 | 0.00034 | 0.00034 |
| Thioctic acid | 0.0002063 | 0.00021 | 0.00021 | 0.00021 | 0.00021 | 0.00021 |
| Vitamin B12 | 0.0013554 | 0.00136 | 0.00136 | 0.00136 | 0.00136 | 0.00136 |
| Sugars | | | | | | |
| D-Glucose | 1.26 | 1.802 | 1.802 | 1.802 | 1.802 | 1.802 |
| Other | | | | | | |
| HEPES | — | 5.958 | — | — | — | 5.958 |
| Hypoxanthine | 0.004083 | 0.00408 | 0.00408 | 0.00408 | 0.00408 | 0.00408 |
| Linoleic acid | — | 0.000084 | 0.000084 | 0.000084 | 0.000084 | 0.000084 |
| Phenol red • Na | 0.0033181 | 0.0013 | 0.0013 | 0.0013 | 0.0013 | 0.0013 |
| Putrescine • HCl | 0.0003222 | 0.000161 | 0.000161 | 0.000161 | 0.000161 | 0.000161 |
| Pyruvic acid • Na | 0.22 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Thymidine | 0.0007266 | 0.00073 | 0.00073 | 0.00073 | 0.00073 | 0.00073 |
| Add | | | | | | |
| NaHCO ₃ | 2.5 | 1.176 | — | — | 1.176 | — |
| L-Glutamine | — | — | 0.146 | — | — | 0.146 |