100mM Nitrogen Stocks

Nitrogen stocks are normalized to be 100mM nitrogen in a total value of 100mL dH$_2$O. As different nitrogen compounds contain different numbers of nitrogen atoms the molarity of the compounds differ:

Nitrogen compounds containing 1N

Proline (C$_5$H$_9$NO$_2$, mw = 115.13g/mol): dissolve 1.15g in 100mL dH$_2$O (100mM proline, 100mM nitrogen)

Glutamate (C$_5$H$_9$NO$_4$, mw = 147.13g/mol): dissolve 1.47g in 100mL dH$_2$O (100mM glutamate, 100mM nitrogen)

Nitrogen compounds containing 2N

Glutamine (C$_5$H$_{10}$N$_2$O$_3$, mw = 146.14g/mol): dissolve 0.73 g in 100mL dH$_2$O (50mM glutamine, 100mM nitrogen)

Ammonium Sulfate ((NH$_4$)$_2$SO$_4$, mw = 132.14g/mol): dissolve 0.66g in 100mL dH$_2$O (50mM Ammonium sulfate, 100mM nitrogen)

Urea (CH$_4$N$_2$O, mw = 60.06g/mol): dissolve 0.30g in 100mL dH$_2$O (50mM Urea, 100mM nitrogen)

Nitrogen compounds containing 4N

Arginine (C$_6$H$_{14}$N$_4$O$_2$, mw=174.2g/mol): dissolve 0.4355g in 100mL dH$_2$O (25mM arginine, 100mM nitrogen)

Allantoin (C$_4$H$_6$N$_4$O$_3$, mw = 158.121g/mol): dissolve 0.395g in 100mL dH$_2$O (25mM allantoin, 100mM nitrogen)