

Reagents needed to run nitrate, ammonium, and phosphate on LCHAT

PO₄ Method (10-115-01-1-T)

1. Stock ammonium molybdate solution (1L) keep 6 months, store in plastic in fridge
40g ammonium molybdate tetrahydrate (NH₄)₆Mo₇O₂₄•H₂O
2. Stock antimony potassium tartrate solution (1L) keep in fridge in dark bottle
3.22 g antimony potassium tartrate tetrahydrate (C₈H₄O₁₂K₂Sb₂•3H₂O)
3. Molybdate color reagent (1L) store room temperature, discard when blue
35 ml concentrated sulfuric acid
213 ml ammonium molybdate stock
72 ml antimony potassium stock
4. Ascorbic acid reducing solution (1L) prepare weekly or when turns yellow
60 g granular ascorbic acid
1g sodium dodecyl sulfate (CH₃(CH₂)₁₁OSO₃Na)
5. Sodium hydroxide- EDTA rinse (1L)
65 g sodium hydroxide (NaOH)
6 g tetrasodium ethylenediamine tetraacetic acid (Na₄EDTA)

NH₄ Method 10-107-06-2A (Salicylate method)

1. Buffer chelating agent (1L) make every month
25 g disodium ethylenediamine tetraacetate (Na₂EDTA)
30.0 g sodium hydroxide (NaOH)
67 g sodium dibasic heptahydrate (Na₂HPO₄ • 7H₂O)
1. Salicylate-Nitroprusside color reagent (1L) store in a dark bottle in the fridge, make every week
144 g sodium hydroxide (NaOH)
3.5 g sodium nitroprusside (sodium nitroferricyanide dihydrate; Na₂Fe(CN)₅NO•2H₂O))
2. Sodium Hypochlorite (500ml) make fresh daily
250ml sodium hypochlorite

NO₃/NO₂ Method (10-107-04-1B)

1. Ammonium chloride buffer (2L) keep in fridge in dark bottle
170 g ammonium chloride (NH₄Cl)
2 g disodium ethylenediamine tetraacetic acid (NA₂ETDA)
15 N sodium hydroxide-enough to bring to pH 8.5 (can use 7 grams pellet NaOH for 2L)
2. Sulfanalimide color reagent (1L) stable 1 month or until pink, store in dark bottle
100 ml 85% or 85 ml concentrated phosphoric acid
1g N-(1-naphthyl) ethylenediamine dihydrochloride (NED)
40 g sulfanilimide