







Appendix B



Prepared Buffers and Solutions













Body Fluid Identification





Kernechtrot Stain

I. Required Items:

Aluminum sulfate	150 g
Nuclear fast red	3 g
dH ₂ O	3000 ml
Total volume	3 L

II. Instructions For Preparation:

Add aluminum sulfate to 3000 ml dH₂O. Stir until dissolved. Add nuclear fast red and stir until dissolved (add slight heat). Bring to final volume with dH₂O. Filter and store in a 4L container.

III. Storage Conditions:

Room Temperature

IV. Expiration Date:

Expires 12 months after preparation.

[illegible]

Picroindigocarmine Stain

CAUTION: Picric acid is explosive if allowed to dry!

I. Required Items:

Picric acid	40 g
Indigo carmine	10 g
dH ₂ O	3000 ml

Total volume 3 L

II. Instructions For Preparation:

Add Picric acid (slowly) to 2500 ml dH₂O. Stir on low heat until dissolved. Add indigo carmine. Bring to volume with dH₂O. Filter and store.

III. Storage Conditions:

Room Temperature

IV. Expiration Date:

Expires 12 months after preparation.

[illegible]

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2% Sodium Acetate Buffer

I. Required Items:

Sodium Acetate 20 g

Acetic acid

dH₂O 1 L

Total volume 1 L

II. Instructions For Preparation:

Add sodium acetate to water. Calibrate pH meter with pH 7.0 standard buffer. Analyst initials preparing the buffer indicate that the calibration check was done. Stir and adjust to pH of 5.0 with acetic acid.

III. Storage Conditions:

Refrigerate at 4 °C.

IV. Expiration Date:

Expires 12 months after preparation.

[illegible]

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10 % Sodium Hydroxide

I. Required Items:

NaOH	10 g
dH ₂ O	100 ml

Total volume 100 ml

II. Instructions For Preparation:

Add NaOH to dH₂O and mix well.

III. Storage Conditions:

Refrigerate at 4 °C in an amber bottle.

IV. Expiration Date:

Expires 12 months after preparation.

[illegible]

Glucose Solution

I. Required Items:

glucose
dH₂O

II. Instructions For Preparation:

Add glucose to dH₂O, while stirring, until glucose precipitates as a solid.

III. Storage Conditions:

Refrigerate at 4° C in an amber bottle.

IV. Expiration Date:

Expires 6 months after preparation.

[illegible]

Phenolphthalein

I. Required Items:

Phenolphthalein	4 g
NaOH pellets	40 g
zinc dust	20 g
dH ₂ O	1 L
!00 % Ethanol	qs to 1200 ml
Total volume	1200 ml

II. Instructions For Preparation:

Add all but zinc to 5000 ml round bottom flask, heat with electric heat. Reflux 2-3 hours until colorless. Cool, decant, bring to 1200 ml volume with ethanol. Pour into amber jar and add zinc dust to cover the bottom of the jar.

III. Storage Conditions:

Refrigerate at 4 °C.

IV. Expiration Date:

Expires 6 months after preparation.

[illegible]

.5N Sodium Hydroxide

I. Required Items:

NaOH	2 g
dH ₂ O	100 ml

Total volume 100 ml

II. Instructions For Preparation:

Add NaOH to water. Stir until in solution.

III. Storage Conditions:

Refrigerate at 4 °C.

IV. Expiration Date:

Expires 12 months after preparation.

[illegible]

HEPES- Buffered Saline

I. Required Items:

NaCl	8.42 g
HEPES	2.38 g
dH ₂ O	~1 L

Total volume 1 L

II. Instructions For Preparation:

Dissolve the NaCl in about 900 ml of deionized water. Add the HEPES and stir till dissolved. Titrate the solution with 40% NaOH to a pH of 7.2. Bring the final volume to 1 liter.

III. Storage Conditions:

Refrigerate at 4 °C or aliquot and freeze.

IV. Expiration Date:

Expires 6 months after preparation at room temperature or 1 year if frozen.

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